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## ADDRESSES.

### ORGANIZATION A NECESSITY FOR PROFESSIONAL PROGRESS.

President's address, delivered before the Michigan State Medical Society at its annual meeting, held in Lansing, Mich., May 3-4, 1894.


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That professional progress, or the advancement of the interests and reputation of the science of medicine is to be desired, we all admit, but how it shall be attained is a problem that has not yet met with a satisfactory solution. It is evident that it must be along certain lines, prominent in which are a higher standard of education, and a higher standard of professional morals, as well as advancement in therapeutic resources.

At present the title, "Doctor in Medicine," in this country does not indicate any degree of literary or scientific excellence in the holder. It does not necessarily mean that he is one whose fitness to care for the physical trials and sufferings of his fellowman has been passed upon and established by a body of competent examiners, but that he is one who has either assumed to himself the title, or one to whom it has been given by a corporation legally chartered by some State Legislature.

In either case there is none to say him nay. In many States, after laborious effort, an imperfect law has been enacted, purporting to protect their citizens from the dangers consequent on the predatory instincts of him to whom the practice of medicine is merely a road to wealth. But so open is the network of these laws, and so indifferent are they whose duty it should be to enforce them, that many slip through and prey upon the public upon whose fitness no corporate college has passed judgment. The facility also with which charters are granted by our unstable Legislatures to any body of men for any or every conceivable purpose, without inquiry as to necessity or even expediency, enables any unprincipled individual whose fancy has pictured to him the enormous revenue to be obtained by "practicing medicine," to acquire legal status among physicians with the slightest appreciable outlay of time, money and industry. The possession of any degree of preliminary education, or the acquirement of any appreciable amount of medical knowledge, is only of importance as a means to an end; and that end the legal right to call himself doctor, and to collect fees from the credulous but innocent public.

Such is the condition in nearly all of these United States, and such will it remain till the honest and honorable members of this profession of medicine unite, all over the country, to establish some method by which there shall be some distinction between the man who practices medicine for revenue only, and him who holds the welfare of his patient and the honor of his profession as his highest earthly ambition.

We, the State Society, profess to stand between the public and fraud. Let us make the profession reality. Let us establish a standard entirely apart from that recognized by law or by any chartered medical college. A standard that embraces more than the possession of a certain amount of medical and surgical lore. One that shall stand to the public as a warrant that the physician who holds a certificate of membership in this body is in all respects entitled to its confidence.

The first and highest qualification of him who is to hold the lives and physical welfare of others in his care should be thorough professional education and training. To the attainment of this, a *habit* of study is necessary; therefore a grade of preliminary education should be demanded which shall be a warrant that habits of study have been formed; that the power to grasp and hold ideas has been cultivated; that a certain amount of trained analytical power has been acquired, so that logical inferences and conclusions can be drawn from existing facts. The young man who steps forth from his college into the world's arena may be called upon at once to grapple with the most serious surgical emergencies, or to wrest human lives from the threatening death consequent on a placenta prævia, and this without time to call upon the older experience of others. It is not enough for him, or for his patient at that time, that his diploma narrates the fact that he has consumed three years in getting his education. Happy is he and thrice fortunate is his patient if his habits of study and his professional pride and ambition have been such as to have enabled him to master the teachings of his professors and to have the knowledge within call of his mind at such time. Nor will the man who is by ability and character fitted to be a member of this body, be content with the knowledge gained while within his college walls.

The true physician will be an inquirer during life. He will, by the force of his own aspirations and impulses, be a searcher after knowledge. He will study the experiences of others as embodied in the weekly or monthly journals, will reason from their reports to his own experience, and as the science advances will put aside views formerly held and grasp that which has been proven. No physician can be progressive who does not, by the reading of medical journals, keep in touch with the thought and experience of the great body of the profession. No conscientious practitioner can feel that he is living up to the highest possibilities of his profession, and doing his full duty to those who intrust their lives to his keeping, who contents himself with the lessons of his own experience and the teachings of former text-books. Professional progress demands constant study.

But for those who by education and industry are fitted to hold the responsible and honorable degree of "Doctor in Medicine," other qualifications should be required to enable them to hold membership in this State organization.

One of the most difficult and yet most vitally desirable virtues for a physician to acquire, if he is so unfortunate as not to possess it, is a recognition of what should be his deportment toward his professional brethren.

If we will place our profession on the heights originally destined for it; if we will make the name of physician honorable and its bearers honored, professional courtesy must stand on a plane but little, if any, lower than professional education.

We must demand that he who will become a member of this organization shall so conduct himself toward his brethren as to add dignity to the profession of medicine, instead of degrading it to the level of low trickery and dishonesty. While there are many who know no other way to rise than by pulling down those above them, many who by openly expressed jealousies and calumnies of their professional brethren have rendered just the remark that was made to me not long ago by a Jewish merchant: "You doctors are worse than Chatham Street Jews;" (let your minds dwell for a moment on the full significance of that remark), I say, while there many who, by their conduct toward their fellow workers, have justified this public opinion, there are a great many, aye, a great majority whose impulses are honorable, whose desire it is to live in harmony or in a spirit of friendly rivalry with their fellows. These by organized effort could so elevate the standard of professional dignity as to implant in the thoughts and hearts of the most dishonorable and mercenary practitioners, a feeble spirit of emulation.

"Harmony and a proper *esprit du corps* may uphold the dignity of even an inferior profession; but the public rarely respects any class of men, the members of which have no respect for each other."

Nothing is to be gained by slanders and calumnies of those in the same profession. There only results (unless the slanderer is lost to all sense of honor and professional pride) a loss of self-respect, a loss of respect on the part of others, and a public degradation of the profession of which he is, unhappily, a member.

Again, by such organization as I have in mind, a stronger stand against the inroads of irregular practitioners would be possible. I doubt very much whether we do not sometimes injure our cause with the public by showing too great sensitiveness as to the tolerance shown such men and by injudicious efforts at their suppression.

"A certain portion of mankind are so constituted that they require to be ridden by others; and if you succeed in unhorsing a particular impostor, it is only to prepare the saddle for a fresh and more unflinching equestrian." By throwing the gauntlet at an insignificant man we at once raise him to the dignity of a competitor.[1]

But apart from our conduct toward pretentious impostors, whom we should utterly ignore as something beneath notice, our conduct toward each other should be marked with dignity and honesty. The professional intercourse of men qualified to bear the title, "Doctor in Medicine," should be characterized by a spirit of friendly emulation and honorable support.

"Medicine, cultivated as a science, aims by innumerable influences to unite its members in a universal brotherhood, and that fraternity should be one of perfect equality. There can be no class privilege, no aristocracy, and no distrust among medical men who properly estimate the honorable character of their calling.

"They will accord to each new member that generous confidence and fraternal regard which are due to brethren bound together by a common sympathy. Nor will that bond be broken, nor that confidence destroyed except by the most absolute proof of professional delinquencies."[2]

But no man can respect his professional brethren in whose breast is not implanted a feeling of reverence and love for his profession. It is his duty to maintain in his individual character a high moral rectitude, a just and honorable conduct, a devotedness to the welfare of his patients, and an unceasing effort to improve himself and his science.

Our profession demands from us respect and honor. It demands the best service of our lives. To live worthy of the profession we have chosen should be next to our religion. That its name shall not be dragged in the dust and trampled upon by all men, it is incumbent upon us, its disciples, to dignify it by lives of professional purity and honor; and by untiring effort to plant its standard still higher.

Hippocrates said (and his remark may unhappily apply to our own times): "Medicine is of all the arts the most noble; but owing to the ignorance of those who practice it, and of those who inconsiderately form a judgment of these, it is at present far behind all other arts." But in our own times it is not merely ignorance on the part of the doctor and the public that has degraded the profession; many other factors have combined to that end. One of the most potent of these is the degeneration of the doctor himself, by reason of his having placed the acquisition of wealth far higher in his desires than the acquisition of knowledge. Cupidity is one great obstacle to professional progress. It stands in the way of the search for more advanced truths. The physician who falls under its power is led into evil practices and unprofessional associations by which his profession, which he should honor with his every power, is degraded to the level of the merest trade.

The spectacle of a man who bears before the public the honorable title of Doctor in Medicine, selling his honor and reputation to the highest bidder and giving testimony in a court of justice which dishonors his profession and degrades its followers is one that merits universal condemnation. An undue desire for wealth blunts a man's professional conscience and lowers his standard of life. Just remuneration for skilled service is right and honorable, but it should not blunt the sense of professional honor; nor displace the desire for professional eminence.

The science of medicine has a right to the first place in the love and devotion of its followers. The struggle for "success" as represented by the largest income or the most fashionable *clientelé* often leads to a forgetfulness of or a disregard for "success" according to the standard of educated men.

[1] Bigelow, "The Medical Profession and Quackery."

[2] Dr. Stephen Smith, "Our Status Abroad."

There is a moral in the remark made by a distinguished Parisian surgeon to an American friend who was speaking of the great reputation of his preceptor: "What has he done?" asked the Parisian; "I do not remember to have read of any of his writings." The American responded in a puzzled way: "It is true he has never written anything, but he has a very large business." "And is that the standard by which you estimate professional excellence?" retorted the Parisian.

A man may by his ability and by his professional traits rise to the highest pinnacle of local public esteem. His reputation as an able successful practitioner may be merited, but his profession demands something more from him. He is not living up to his professional duty if he does not endeavor to enrich the field of professional knowledge by the ripe results of his own investigations and experiences. If he, by writings and contributions to professional journals, gives to his fellow physicians the valuable knowledge which he is continually gathering, his reputation is imperishable. But if he lives content with the wealth he can acquire, his name and his fame die with him.

Every man, if he would have the respect of the public, must respect his profession. He must honor it if he would be honored by it. He must remember that it depends on how he bears himself whether he is the peer of the highest or the barely tolerated servant of the public. As Dr. Oliver Wendell Holmes puts it,—

"If Sir Astley Cooper was ever called to let off the impure ichor from the bloated limbs of George the Fourth, it was the king who was honored by the visit and not the surgeon. If you do not feel, as you cross the millionaire's threshold, that your art is nobler than his palace, the footman who lets you in is your fitting companion, and not his master."

But it is not merely that the relations of physicians to each other would be raised to a higher standard by such thorough organization of the best elements in the profession as I am advocating; nor that thereby our respect for, and attitude towards our profession would be advanced, but that the relations between the public and the medical profession would be gradually changed.

We should enter upon an era when to this organization and its individual members the people would naturally look for advice as to matters pertaining to the public health.

The physical training of our youth, and the relation of the physical to the mental well-being would be placed under the supervision of those who by reason of their membership in this Society would be esteemed and accepted as qualified censors in such matters.

It is the duty of rational medicine to enlighten the public, as well as the profession, in regard to the true powers of the healing art.

The people deserve to be undeceived and re-educated that they may know what is true and trustworthy from what is unfounded and fallacious.

The profession themselves will proceed with greater confidence and self-approval in proportion as they shall have informed mankind on these important subjects. Honesty toward ourselves and the public will encourage trust and confidence in return. The physician who can forget, for the time, his own pride and professional ambition in his desire to deal honestly with his patient, will ultimately win from his patients and the community at large such reputation as shall afford more satisfaction to his professional instincts and aspirations than a lifetime of selfish effort will attain. Mistakes are made, reputations are injured, and the profession itself brought into disrepute by the habit of promising more than we know we can perform. Our profession is often brought into disrepute and made unpopular with a large and sagacious part of the community because so many members, by unfulfilled promises, have disappointed expectations which they have allowed themselves to raise. We may safely undertake and promise to cure diseases which we know to be curable, and to perform what art and science can do towards conducting doubtful and dangerous cases to a happy issue, and we will thus cultivate confidence and elevate our profession.

It should be every man's ambition to elevate the standard of his profession among his brethren and in the estimation of the public; and to gain such eminence as he may by upright conduct toward his fellows, by honesty to the public and by literary and professional industry. No man can permanently sustain his status among gentlemen if he do not first secure to himself the sympathy and respect of his fellow laborers. This being attained, he can by laborious effort and persevering industry rise to eminence in his profession and acquire the honest regard and respect of his fellow citizens. He can live an honored and envied life and build to himself that grandest of monuments, a name that will live forever in the annals of his profession and in the hearts of its disciples.

If, on the contrary, his ambition is confined to himself, and his conduct to his fellows and the public regulated only by his estimation as to how everything may be made to serve selfish aims, and to redound to his own personal aggrandizement, he alienates his fellows, he dishonors his profession and he defrauds the people who trust him. His practices become corrupt, and driven by the scourge of his own outraged personal self-respect, he descends continually to lower levels. Pitiable, indeed is the condition of that man who is shunned by his *confrères*, whose name provokes only contempt, and who is dismissed from the thought as one fallen from the high estate of a Christian gentleman and an honorable man.

And yet such there are in our profession. Such there are whose names are enrolled as members of this Society, and who thereby, to the great mass of the citizens of this State, are indorsed as the peers of those whose names are endeared to us by long lives of honest and honorable professional effort.

Such things should not be. Our profession demands of us that we should countenance only that which is honorable. That we should never forget its claims and our duties. The public have a right to demand of us that we shall point out to them those who are worthy of confidence; those to whom they can intrust the lives of their children. And finally, an honorable and proper pride demands of us that we shall do what we may to purify the name, "Doctor in Medicine." This is possible, but only possible by means of re-organization on the lines that I have pointed out. Do not imagine that I am dreaming of a professional Utopia "where every prospect pleases," and even man's not vile. There will

be in every Eden a serpent. There must needs be men who, with the outward semblance of honesty, cover dishonorable characters; but we can make the manifestation of such dishonesty unpopular. We can educate the public to a belief in the reality of our profession and the nobility of our art. There are enough physicians in this State, to whom their profession is dear, to rehabilitate the name, "Doctor in Medicine," if they will act together. This can only be done through organization; not merely into societies, but in such a way and according to such plan as shall unite the profession of the entire country in one bond, under one government, and designated by such title as shall be distinctive.

It is true that we have a national organization, and that we have State organizations, and innumerable minor or local societies, but there is no concert of action, no community of interests, except that the members of all legally bear the title, "Doctor in Medicine," and all agree to conform to the Code of Ethics of this national organization. There is need that we re-organize so that all may be under one central government and act as one body. It must be with any member of any county society as it is with the private soldier in the United States Army. By enlisting as a private soldier, he becomes a member of a company, and at the same time and by the same act, a member of a regiment, a brigade, a corps, etc., so that he is directly under the control of the Commander in Chief of the Army of the United States. After some such plan might the medical profession of this country be organized. We may not be able to remove at once from our societies those members who through dishonorable practices degrade their profession, but we can protect our domain from further incursions.

Such organization as I shall suggest will enable the American Medical Association to erect such defences as it chooses, and to dictate authoritatively who may and who shall not be admitted to its highest privileges. It can not control the acts of legalized medical colleges as to what preliminary education they shall demand of their students, nor can it dictate to them how long and of what character their course of study shall be, but it can say what qualifications of education and conduct shall be necessary to enable an applicant to join its membership. At present each State has its own State society, and in this, our State of Michigan, there are some twenty-five local societies. But there is no mutual interdependence. Each organization is independent of every other. There can be no concert of action throughout the nation or even throughout the State, because there is no central universal government.

I have said we might organize in some respects according to the plan of our Army. It would be well that every local society should be a part of our State society, and not merely in name but actively, and under its government. And that every State society should be a living constituent of the National organization, and that no local or county society should be represented in the national society, except through its State organization. It would be well also that every man, by joining a local society should by that same act become at once a member of the State and national societies, and that no man can become a member of either of these societies except through joining a society in the county or district where he resides. Thus would these local organizations stand guard at all the avenues of entrance, first to the State society and, second to the American Medical Association, and fewer unworthy men would find entrance.

To the annual dues demanded by and payable to the local society, would be added $3 for the State and $5 for the National organization, and every member would not only be a member in name of these organizations, but he would be entitled to, and receive their Annual Transactions. He would also bear the title of "Fellow of the American Medical Association," which could thus be made to stand to the public and to the profession of the world as a title of honor and a guarantee of professional worth; on a plane as high as, or higher than, the F.R.C.S. of the British profession.

It might be well also, in this plan of re-organization, that the presidents of the local societies in the State, which are in affiliation with the State society, should constitute an Advisory Board of the State Society, to which all matters pertaining to the admission of members and the government of these local societies should be referred. This Board might also be the executive organization of the State society, through which many matters of routine which now take up the time of the entire society, could be transacted. Thus more time could be devoted to literary and professional work, and not only the number of papers, but the standard of excellence increased.

It would also follow, if the profession of all the States should organize on the same general plan, that the presidents of the various State societies would constitute an Advisory Board (if I may so term it) of the National organization, which should have general supervision over matters pertaining to the government of the State societies, and which should formulate rules controlling the admission of members to these smaller county and district societies. In this way would uniform rules in all the States be secured, and the standard could be placed as high as seemed desirable. It is probable, also, that such rules and regulations would be respected by the local societies to which they would be directed, because formed by a Board of State officers, elected through delegates from these various local organizations.

By such a plan as I have outlined, the qualifications of education and character necessary to become a "Fellow of the American Medical Association" would be uniform throughout the country, and could be placed high enough to stand to the public as a guarantee of the fitness of such men to practice the profession of medicine. The membership of the State societies might be doubled, and instead of five thousand members of the American Medical Association the number might easily be twenty thousand.

The financial condition of these societies would be sufficient to enable them to carry on all desirable lines of professional work. The desirability of being able to write himself a "Fellow of the American Medical Association" and thus stand before the public indorsed by the best elements of the profession throughout the entire country, would be sufficient inducement to make most physicians live up to the requirements of their societies and promptly pay their annual dues.

The standard of medical education would necessarily be raised to conform to the requirements of

the national society, because, while we could not legislate against or indorse any college or set of colleges, we could require each applicant for membership to be a graduate of a college that required a four years' course, or to conform to some similar standard. If laws were needed to regulate the practice of medicine, we should be in a position to secure uniformity throughout the entire country.

It would not be long before the public would understand that to be a "Fellow of the AMERICAN MEDICAL ASSOCIATION" was a certificate of such professional ability as would enable its possessor to grapple with any disease, however intricate, or to meet any emergency, however sudden. That its holder was a gentleman in his professional life, and one who would be a reliable guide in all matters pertaining to the physical well-being of his patients.

Thus would the science of medicine be continually advanced, not only in the estimation of the public, but, what is far more important, in the estimation of the members of the profession. There would be an incentive to honest effort toward professional growth and toward honorable professional intercourse.

The acquisition of wealth would not be placed far above all other motives. Honor and honesty would co-exist with a desire for an advancing reputation in the professional world and the science of medicine would attain the position to which it is entitled.

## THE NATION'S SIN OF OMISSION.

Read before the Texas State Medical Association at Austin, April, 1894.

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CHAIRMAN SECTION ON STATE MEDICINE AND PUBLIC HYGIENE.

The Constitution of the United States guarantees to every citizen life, liberty and the pursuit of happiness. The laws of the country have been framed by wise men, after careful study and observation, looking to these ends; and, in a sense, every enlightened government is "paternal." It is jealous of any infringement of these rights, and the humblest citizen can claim, and through the courts receive, protection in his life, liberty and property; and any trespasser upon either is swiftly punished. The arbitrary arrest, in a foreign country, of the humblest person claiming protection of the stars and stripes, is resented, his liberty secured, and restitution demanded, and the demand is backed, if need be, by the whole military and naval power of the country.

The laws in respect to life and liberty, and in regard to peaceful possession of one's own, and the enjoyment of the fruits of his labor, have been amended and made better, as time and experience have revealed defects, and as changed conditions have made necessary.

The laws with regard to special privileges are framed with an eye to the protection of the life, liberty and property of others, and of society generally. No man is permitted to conduct a business the nature of which threatens society with danger; such, for instance, as the running of railroad trains and steamboats, and the operation of factories, mills and shops; and such conditions are attached to the privilege, when granted, as to reduce the danger to others to the minimum.

In return for this protection and paternal guardianship, the citizen is taxed to carry on the operations of the machinery of government, and certain duties are required of him, all of which are duly specified, and made compulsory, under a penalty for neglect, failure or refusal to perform them. He shall serve on the jury, do certain road work and, in time of war, shall bear arms in defense of the country; or he may be impressed by any sheriff to put down any local lawlessness. He is taxed, moreover, for the support of the defectives, and for schools and poorhouses.

As civilization has advanced, and experience demonstrated the necessity, laws have been enacted which throw every protection around one's live stock. His cattle are protected from infectious diseases by expensive quarantine, if need be; and, especially in Texas, the theft of cattle, a horse, more particularly, is a most heinous crime.

But with regard to the *health of the citizen*, there is, in Texas and some other States, a woeful lack of either solicitude or legislation. The most ignorant man is permitted the dangerous privilege of practicing medicine, without a restricting clause in the law. He is licensed by the possession of a diploma alone (it may be stolen or purchased) which, according to Webster, is only a certificate, or "evidence of a degree having been conferred," and "conveys no rights or privileges whatever," to enter the community, to invade the family of his confiding dupes, and take in hand the life of any member; to prescribe the most deadly drugs—of the properties of which he may be entirely ignorant—and, by his ignorance, kill with impunity. He can set aside the law in regard to the sale of liquor on certain days and, by a prescription, can accommodate any old toper with the stuff he craves. Moreover, by virtue of his calling, he is exempt from certain duties to the State or county which other citizens have to perform, In short, the quack doctor (with or without a diploma) is one of the many and grave dangers that threaten society; and in this State protection has, so far, been prayed for in vain; the bugaboo of "personal rights" is pleaded, and the individual's alleged "rights" to practice medicine are respected, often to the great detriment of society. The citizen *has a right* to protection against this, as all other dangers—purchased by his taxes—and his support of the government and his obedience to the law.

Enlightened governments become enlightened through observation and experience; and, as we have shown, our laws are amended, and jurisprudence, in every respect (except medicine), has developed *pari passu* with the progress made in the many relations of life and business.

The existence of a soul in man is said to be evidenced by the possession of the faculty of reason, and this faculty alone distinguishes man from the lower animals; the power to reason, philosophers say, is evidenced by the ability *to profit by experience;* and no race or people is thought to be capable of self-government who do not so profit. Estimated by that test our boasted civilization is a myth, and our government unreasoning and unreasonable; for it is evident to the most casual observer that it has failed to profit by past experience in dealing with one of the most vital and essential elements of danger, to-wit: Disease. True, quarantine has been improved year after year, as experience has revealed defects and the necessity for additional requirements or changes, until it is now reduced to a rational system, and is almost perfect. But, while we would not be thought to underestimate the value and im-

portance of quarantine as against the invasion of foreign disease, we will aim to show that by attention to this feature of protection alone, to the neglect of internal sanitation, the Government, to use a homely expression, is "saving at the spigot and losing at the bung." The lives lost, the time lost, and the property values destroyed in time of the most destructive epidemic, are as a drop in the bucket to the lives, labor and property being destroyed every day, all over the country, by diseases *easily preventable;* and it is not, by any means, through ignorance of their nature and cause and the mode of prevention that this loss occurs, but by the apathy, indifference, neglect, failure—call it what you will—of the general and State governments to take hold of the subject, and, profiting by the experience and wisdom of the medical profession, apply the law to the eradication and prevention of the local and internal diseases, to amend the laws in accordance with the discoveries and recommendations of the medical profession; in short, to avail of the benefits and apply the principles of State medicine.

Society *has the right* to protection from typhoid fever, consumption and diphtheria, as well as from yellow fever and cholera, or other danger of whatever kind; and it is clearly the duty of the Government to secure it.

Recognizing, then, the fact that thousands of lives are annually lost through the agency of preventable diseases; recognizing that the general Government has failed so far, to secure to society the protection to which every citizen is entitled, it is pertinent to inquire as to this grave omission.

In view of our civilization, the intelligent zeal with which laws have been framed for all other requirements of the citizen, whenever experience has shown what was best; the solicitude manifested for the safety of the poorest citizen, if in trouble abroad, it can hardly be said that it is either ignorance or indifference, on the part of the lawmakers, that causes this sad lack of legislation, and the consequent great danger that threatens the public health. Our Congressmen, beyond doubt, have an intelligent appreciation of the maxim, "Public Health is Public Wealth," and of the importance of health to the happiness and prosperity of our country. What, then, is the reason that in so many States no safeguard is thrown around that which is so essential to all other rights of the citizen—the possession of health? Why has not the general government profited by the experience of sanitarians everywhere; utilized their observations and researches in the bacteriological laboratory and at the bedside, and the results of experiments shown in abating disease by cutting off a vitiated water supply, for instance?

The question is easily answered: It is because there is no *organization* in the medical ranks—no coöperation between medicine and law; because there is no *head* to direct the vast energy of sanitarians and laboratory investigators, which, being expended spasmodically aud individually accomplishes nothing; no one to direct how the accumulated knowledge of medical and sanitary science may be utilized; no department devoted to this paramount interest, whence such information can be procured as will enable Congress to frame laws which shall constitute an intelligent application of means to ends—the adaptation of the principles of State Medicine.

Individual effort counts for nothing. We have, all over the land, the most intelligent and indefatigable workers in biological research, and in every field of medical and sanitary investigation. They find that certain deadly diseases are caused by the presence of a bacillus or its products, and they discover also its antidote. The knowledge that hydrophobia is caused by a poison in the salivary gland of a dog or other animal; the knowledge that, to date, no antidote has been revealed to science—that she has no remedy even to palliate the dreadful sufferings of one inoculated with this poison—had as well never been acquired, so far as any protection is afforded by law against this great danger. The same may be said with regard to many other sources of danger; no protection is afforded by law against polluted water, nor against diseased meat, or decaying fruit and vegetables on sale at every stall in most cities. The medical profession is like an army of brave and capable men without a leader; each man is waging war upon his own hook against the invisible hosts of earth, air and water, and each cries out singly for help from the strong arm of the law.

Were the statistics compiled by the State Boards of Health, showing the fearful mortality from preventable diseases, and the results that have followed even spasmodic efforts at sanitary reform, brought to the attention of Congress by the united medical profession, it is not to be doubted that they would be convinced, and speedily enact such laws as would enforce sanitary reform everywhere. But, unfortunately, the profession is divided; and each section represents to Congress a different course with reference to meeting the trouble. And Congress, for want of intelligent advice, really does not know what is best to be done.

As the AMERICAN MEDICAL ASSOCIATION comes nearer being a representative organization, reflecting the concensus of medical opinion, than any other in this country, the bill formulated by their committee and now before Congress should be regarded as being the first step in the sanitary reform needed.

In this connection the movement is of vast importance. Indeed, it is the most important matter now engaging the attention of the medical profession. In that bill the many sources of danger are pointed out, and suggestions are made for compilation of such statistics and the gathering of such information generally, into one office, as will enable the Secretary to give to Congress the exact data upon which to frame laws to meet every requirement.

Certain States have been pioneers in this great work, and, listening to the suggestions of their sanitarians, they have enacted laws which, in a short time, have reduced the mortality of certain diseases 50 to 100 per cent. Illinois, Ohio, Michigan, Massachusetts, and other States, may be mentioned as setting a praiseworthy example. In Illinois, Dr. John H. Rauch,—the Farr of America, peace to his ashes,—did more for sanitation and the advancement of preventive medicine than any man living or dead. That State should erect to his memory a monument that will pierce the clouds, and in letters of living light inscribe upon it, "*Benefactor.*" The condition of affairs sanitary in Illinois before and after Rauch's measures of reform were inaugurated, will serve as an illustration of what may be done by legislation based upon sanitary and medical knowledge.

The saving to the State by the wisdom of that one man, and the energetic and younger men who succeeded him and still further carried out the inspirations of his genius, if estimated in money would pay the national debt, or the expenses of his Government ten years, and yet—that is only one State. We will confine ourselves to Chicago, and briefly point out the results in the city alone, since the inauguration of the World's Fair. For the purpose, we avail ourselves of an admirable paper in the *Independent*, entitled,

SOME SANITARY GAINS.

"In 1891, in Chicago, there was an average daily mortality from typhoid fever of 5.4, chiefly young lives. There was a betterment in 1892, as a result of some sanitary attempts as to water supply and sewerage.

" . . . At one time in 1891 the percentage of typhoid fever deaths was 16.6 in 10,000, making a total of 1,997; only three short of 2,000, and each death is justly presumed to represent ten cases which recover.

" . . . Nobody doubted that the cause of the trouble was a polluted water supply. . . . Matters had considerably mended in 1892, but then the mortality was equal to that of Philadelphia in the Centennial year.

"It will perhaps present a more striking picture if we say that in January, 1892, there were 311 deaths from typhoid fever in Chicago, while in the much more compact city of Brooklyn there were only 8. In May, 1891, half as many people died as in the whole of Massachusetts during the entire year. Such was the condition before the beginning of the World's Fair project, and people were afraid to go there. Sanitary measures were inaugurated. To be brief, a canal four miles in length was cut, which disposed of the sewage, and pure water was conducted to the city from a distance of twenty-five miles. Crematories for the disposal of garbage were introduced, and from being a city of naturally unhygienic surroundings, situated on the borders of a great marsh and lake, where sanitary engineering was not only difficult but very expensive, and having consequently a heavy death rate, Chicago has become, while not a sanitary model, a standard for comparison with older and less densely and more favorably located cities, like Baltimore and Philadelphia, the mortality from typhoid fever having fallen from 311 deaths in January to 47 in December. And this was accomplished by laws in accordance with suggestions of the State Board of Health, based upon statistics compiled by the Board, and other sanitary knowledge, the result of individual experiment and research; an example of how medical knowledge can be applied by the State for the protection of the public health.

Should Congress create a Department of Public Health in accordance with the petition of the AMERICAN MEDICAL ASSOCIATION, it will be the first and most important step in the direction of remedying the great evil complained of,—the unnecessary deaths of so many thousand people. In the Committee's memorial to Congress, the duties of the Secretary of the Department are suggested, and they cover every phase of sanitation, comprehend every subject that has a bearing upon the public health. When a head shall have been created and the department organized, all the discoveries of individual workers, all the statistics collected by State and local boards of health will be focused there, collected and classified, and thus will be made evident what laws are necessary. The results of such compilation would be most astounding.

To give an illustration, even on a small scale, of the immense losses being sustained, we will take the deaths from preventable diseases in only one or two cities, and estimate in dollars and cents the value of the lives and time lost.

In the *Scientific American* is published, under the head of "Sanitary Negligence," a table showing the mortality of a number of cities in America and Europe (prepared by the Secretary of the Maryland Board of Health). From this table we take the following as illustrating the difference in mortality of the principal American cities.

The annual death rate per 1,000 inhabitants is as follows:

| | |
|---|---|
| New York | 26.47 |
| Brooklyn | 21.84 |
| Chicago | 18.95 |
| Boston | 23.88 |
| Philadelphia | 21.95 |
| St. Louis | 18.47 |
| Baltimore | 21.10 |
| San Francisco | 18.21 |
| Cincinnati | 19.67 |
| Cleveland | 18.19 |
| Buffalo | 16.28 |
| New Orleans | 28.72 |
| Milwaukee | 16.00 |
| Minneapolis | 9.60 |
| St. Paul | 9.61 |

The writer of the article says: "There is no more accurate gauge of civilization actually attained by cities than their comparative mortality tables. It is the object not only of medicine to save and lengthen human life, but it is (ought to be, but apparently it is not,) also the supreme object of the entire governmental and social mechanism." "In a general way, the higher the death rate, the greater the indifference to hygienic conditions of life." "There is no reason, except a disgraceful reason, why New York should allow a death rate of 7.36 higher than that of London, (19.11). This means that New York permits the unnecessary death of 6,630 of her citizens every year." "With a difference of death rate between New York and Brooklyn, just across the river, of 4.63, New York is criminally chargeable with 4,171 additional and unnecessary deaths every year. As compared with Philadelphia there are 4,071 more deaths to her debit. And as compared with Chicago, the appalling number of 6,774. There is certainly no good reason why the mortality of Philadelphia and of Boston should be higher than that of Chicago; but the table shows that Philadelphia kills, proportionately, 1,673, and Boston 1,200 more of her citizens each year than the city that is accredited with drinking her own diluted sewage. It is plain that something is radically wrong."

And these comparisons were made, it seems, even before the great source of typhoid fever,—the polluted water of Lake Michigan,—was abandoned and the introduction of pure water from a distance; the disparity in mortality as compared with these same cities must be still greater in future.

The excess of deaths in five cities over the deaths in Chicago foots up as follows:

| | |
|---|---|
| Boston as compared with Chicago | 1,200 |
| Philadelphia | 1,673 |
| New York | 6,774 |
| Brooklyn | 1,413 |
| Baltimore | 490 |
| Total | 11,550 |

"This," says the writer quoted, "is the cost of criminal negligence of known laws of health in only five of our cities. If London cared as little for the lives of her citizens as New York seems to care for hers, there would die in that city every year 21,556 people more than at present die." The money value of the lives lost in those five cities alone, as figured by the statistician quoted, is over forty-six millions of dollars; while the time lost by others sick, *i.e.*, according to Farr, there are two years of sickness to every annual death, or in this instance (11,556 deaths) 23,110 years of needless sickness, which, estimated in money values means, for lost time alone, $6,930,000 besides bills for the doctors, nurses, druggists and all other expenses. "And yet," says the writer, "when the city fathers are asked for a few thousand dollars for meat inspection, for new and necessary sewers, for an unpolluted water supply, or for any other measures of preventive medicine, the request is refused, or acceded to with such cringing stinginess as to be ludicrously inadequate." "In only five cities, and estimated in crude financial losses, we have seen there is a squandering of some fifty-three millions of dollars. Extend the calculation,—easily made,—to the whole country, and it is recognized that we are wasting several hundred million dollars worth of human lives each year, by our recklessness and our stupidity. The medical profession heroically works to save a few thousand sick, while the community goes on blunderingly and savagely killing and making sick by the million."

Our writer is wrong,—as we have attempted to show—to attribute this fearful mortality to either ignorance, or stupidity, or parsimony, so far as the Government is concerned. It is a national sin not to lower the death rate all over the United States; but it is a sin of omission in the failure to apply the vast concrete knowledge obtained by medical and sanitary science to the prevention of disease,—in accordance with the clearest dictates of humanity, reason, justice and common sense. But this the general government can not do, or be made to see the necessity for doing, until provision has been made for collecting, compiling and classifying this knowledge, and there is brought to its attention the cost in dollars and cents, of sanitary neglect; till the deaths all over the United States from preventable disease are consolidated, and it can be shown how much in money can be saved to the Government by the passage of laws to apply the remedy pointed out by sanitary science. Until the Government recognizes the great necessity here attempted to be shown for the creation of a Department of Public Health, and creates it, and puts it into operation, it must stand chargeable with criminal neglect, and held responsible for this fearful waste of human life.

**The annual meeting** of the New York State Board of Health was held May 3. Dr. Florence O'Donohue was reëlected President, and Dr. J. T. Barnes, of Albany, was elected Secretary of the Board, *vice* Dr. M. Barnes resigned.

# ORIGINAL ARTICLES.

## A NEW METHOD OF VALVULAR GASTROSTOMY WITH A MUCOUS MEMBRANE LINING.

BY EDMUND ANDREWS, M.D., LL.D. AND E. WYLLYS ANDREWS, M.D.

PROFESSORS OF CLINICAL SURGERY IN THE MEDICAL SCHOOL OF THE NORTHWESTERN UNIVERSITY, AND SURGEONS IN THE MERCY HOSPITAL, CHICAGO.

The older methods of making a stomach fistula for feeding, in case of impassable stricture of the esophagus, seldom proves satisfactory. Food is easily introduced and digested, but can not be forced through the pylorus into the intestine, because at every contraction of the stomach for that purpose most of the contents are forced out through the fistula. Thus the food is lost, and many of the patients die of starvation. A mechanical rubber valve which we invented in one case partly overcame the difficulty, but did not permanently save the patient.

Wetzel devised the following method: A small opening being made into the stomach, a rubber tube was inserted, and the outer portion of the tube laid along the external surface of the viscus, the stomach wall was folded over it for one and one-half inches and fastened with Lembert stitches, taking up only the peritoneal and muscular coats. The outer end of the new canal was stitched to the skin. The fistula thus formed resembled the ureter where it enters the bladder, and being thus valvular prevented leakage. A difficulty, however, arose. The new canal was lined with peritoneum and not with mucous membrane. It threw out granulations, and could only be kept from closing up by constantly wearing the tube.

Kocher, of Berne, modifying a plan of Alberti's, proceeds as follows: He draws about four inches of the stomach out of the abdominal wound, and stitches up the latter except about two inches. Then the surface of the protruded stomach-pouch is stitched to the wound. Next, he begins at the upper end of the wound and forcibly makes a channel between the superficial fascia and the muscle, etc., carrying the channel up outside the cartilage of the seventh rib, and onward to the sixth rib. Here he cuts an orifice through the skin. He then seizes the projecting stomach-pouch, forces it up through the new channel, and brings the tip out at the orifice on the sixth rib. Here it is opened and stitched to the wound in the integument. The bulging cartilage of the seventh rib acts to compress the pouch, and is said to prevent leakage. It seems like rough treatment of a delicate organ, but there has not yet been enough experience to decide the question of its usefulness.

In a recent case of esophageal stenosis we first tried the plan of opening the stomach with retrograde dilatation of the stricture of the esophagus, closing the stomach wound and returning the viscus. This restored the power of swallowing for a time, but the stricture again contracted, and shut off nutrition. Next we tried Wetzel's plan with perfect success, but for reasons above stated, the tube must be constantly worn.

After considerable experiment on cadavers and animals, we find the following operation feasible, and as it furnishes a valvular orifice lined with mucous membrane, a tube will only need to be used occassionally to prevent possible contraction at the orifices:

The mucous membrane of the stomach is connected with the muscular coat by a layer of exceedingly loose connective tissue, so that any spot on the mucous coat can be made to glide some three-quarters of an inch on the parts beneath. As an experiment, we injected melted lard forcibly into this loose submucous tissue, raising up the membrane three-quarters of an inch, in places. The specimen was then dried to render it rigid, cut into thin sections and the fat dissolved out in ether. Fig. 1 shows a section of this sort, the outer and inner walls being connected only with delicate reticulated fibers.

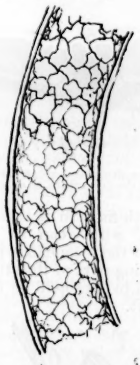

Fig. 1.

When the muscular walls of the living stomach contract, the mucous membrane is thrown up into high ridges, presenting to the eye of the surgeon curious quadrangular patterns, very different from the appearances in a dead stomach. Fig. 2 is a diagram to represent the folds in cross section.

Fig. 2.

*P*—Peritoneal coat. *M*—Muscular coat. *C*—Connective tissue coat. *Mc*—Mucous membrane thrown into folds. *F F*—The folds.

This exceeding looseness of the membrane greatly facilitates raising flaps from it, to construct the valvular mucous canal.

The operation is made as follows: External antisepsis is obtained as usual, but the preliminary washing out of the stomach can not be performed on account of the stricture of the esophagus. The external incision is made in the usual way, and the stomach exposed and identified. It is then drawn out through the wound far enough to give freedom in handling. An incision is then made from near the upper border directly downward about two inches. Before this is done, however, provision must be made to prevent its fluids from getting into the peritoneal cavity by the careful placing of large sponges. As the patient has been prevented by the stricture from taking food, the contents will be found to be only the secreted fluids. The cavity is now washed out with warm boric acid solution, and the edges of the incision secured against slipping back into the abdomen. Now the lower part of the anterior wall is raised, turned out through the incision, and spread out flat. From the lower end of the cut, two incisions are made through the loose mucous membrane, one to the right, and the other to the left, each extending about three-quarters of an inch laterally from the lower end of the main incision. From the end of each of these two mucous membrane incisions, another cut is made downward through mucous membrane, parallel to the axis of the body and to each other for a distance of about one inch and one-half. At the lower ends the two incisions are turned at a right angle toward each other, but not meeting, a separation of one-third of an inch being left between them.

In Fig. 3, the quadrangular incision is shown by the letters *A A*, and the mucous membrane flaps by *F F*.

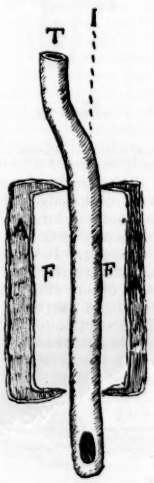


Fig. 3.

*A A*—The angular incisions through the mucous membrane, exposing the muscular coat. *F F*—The loose mucous membrane flaps. *T*—The tube. *I*—The dotted line shows the position of the incision into the stomach when the parts are replaced.

The next step is to place in position a smooth rubber tube of about the size No. 10 of the English catheter scale. There is nothing better for the purpose than a piece of well sterilized "velvet-eyed" soft rubber catheter. This is laid along the middle of the quadrangle of mucous membrane, and projects an inch below it. Now turn up the flaps *F F* over the tube and close them together with Lembert stitches, placed so as to turn the mucous surfaces in, and bring the connective tissue surfaces in contact. The extreme looseness of the submucous tissue allows the membrane to close over the tube without force.

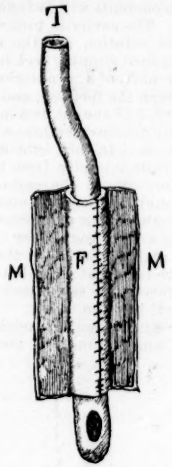


Fig. 4.

*T*—The tube. *F*—The flaps of mucous membrane closed over it. *M M*—The mucous membrane adjacent to the incision.

This stage of the operation is represented by Fig. 4. Now take hold of the edges *M M* of the mucous membrane with toothed forceps, and they can be folded without difficulty over the membranous tube *F*, and stitched together. In closing these flaps, the edges should be laid with the connective tissue surfaces against each other, and the needle passed to and fro, or through and through, something like a reversed Appolito's suture. At least, we prefer this method, though it is not absolutely necessary. The three following cross sections will make the operation more fully understood:

Fig. 5.

*T*—The tube. *I I*—The incision through the mucous membrane. *Mc*—The mucous membrane. *M*—The muscular coat. *P*—The peritoneal coat.

Fig. 5 shows the tube laid in position ready to have the mucous flaps *I I* folded over it.

Fig. 6.

*T*—The tube. *S*—The mucous flaps folded over the tube. It is well to loosen one flap more than the other, so as to bring the suture, *S*, a little on one side of the center.

Fig. 6 shows the cross section after the first flaps are in position.

Fig. 7.

*S*—The suture of the first flap on one side of the tube. *Si*—The second flap lapping over the first suture, so as to come somewhat on the opposite side.

Fig. 7 shows both flaps in position, arranged so as to "break joints," which can be accomplished by pulling the edge of the second flap past suture *S*, and securing it by letting part of the stitches of the seam *Si* go deep enough to take hold on the surface of the first flap beneath it.

Fig. 8.

Diagram showing the relations of the tube to the parts.
*T*—The tube. *O O*—The outer wall of the stomach. *M M M*—The mucous membrane.

Fig. 8 is a diagram showing the tube in position and enveloped in its double mucous flaps.

Fig. 9 is an outline sketch showing the tube in position, and the incision above it closed by a Czerny-Lembert seam. The dotted lines indicate the portion of the tube inside the stomach.

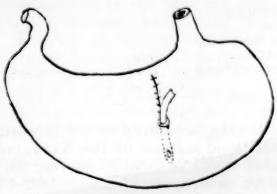

Fig. 9.

Sketch of the stomach with the tube in position.

The flaps having been carefully closed, the prolapsed portion of the stomach is returned to the interior, with the upper end of the tube projecting out of the incision. The stomach wound is then closed with a Czerny-Lembert suture, and the edge of the orifice, from which the tube projects, stitched to the skin. Finally, the wound in the abdominal wall is closed, except the point occupied by the tube. A small plug is inserted into the end of the tube, and the whole dressed antiseptically. I think it well to begin almost at once to put in a little milk with a syringe, so as to keep up general nutrition enough to favor union by first intention.

A female dog weighing forty-five pounds was subjected to this operation April 5, 1894. There was no leakage of the contents of the stomach whatever. At the end of a month she was in robust health, and on being killed May 4, the valve in the stomach was found in good working order, and readily pervious to tubes. We think that there might be a liability in some cases to a contraction of the external or internal orifice of the channel, and hence after the tube is withdrawn, it should be occasionally re-inserted to test the size of the channel, and if necessary to dilate it.

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## INSANITY; SYMPTOMS AND TREATMENT.

BY FREDERICK HORNER, M.D.

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Dr. Carpenter's "Principles of Human Physiology," tersely defines insanity to be "in its highest degree a complete disturbance of the intellectual faculties; the thoughts are not inactive, but rather far more active than in health; they are uncontrolled and wander from one subject to another with extraordinary rapidity; they twist and turn a single subject in every way; the faculties seem to have escaped from all restraint, thought after thought succeeding with such velocity that all power of perception is destroyed and the mind ceases to perceive impressions made upon the senses. The patient raves, unconscious of what occurs around him; he fancies that he hears voices, while ocular spectra excite further rhapsodies and a condition of delirium. The intellectual powers are disordered, depending upon structural disorder of the cerebrum. Disordered emotional excitement constitutes impulsive moral insanity or monomania, destructive in tendency and presenting examples, sometimes of homicide or suicide, without any apparent motive." Such cases, it may be added, can not always be attributable to perversions of the reasoning process, but arise out of a perverted emotional state—the victims or subjects of which do not belong to the criminal class, though they may imitate their evil example, since it is well known that the consciousness of the performance of a certain act by one individual gives rise to a tendency to its performance by another.

Of other forms of insanity, there are mania—due to excessive cerebral action—and dementia, enfeebled action. Alcoholism, the puerperal state, fevers, chronic meningitis, or certain forms of inflammation, nervous shock due to wounds, loss of property, etc., all predispose to insanity, especially where heredity exists. The man whose insanity is often not so much as suspected, until he breaks out in a terrible and shocking crime, is the most dangerous person in the community. And here the opinion may be advanced that riots, murder and suicide would occur, perhaps, less often in some portions of our country if the people were more enlightened as to the origin and etiology of insanity. It may be asserted as a fact that the mass of the profession do not make the subject of insanity a specialty, but rather ignore it. The medical journals contain few publications on this theme. The *American Journal of the Medical Sciences* at one time contained a synopsis of the reports of superintendents of hospitals for the insane, prepared annually by the late Dr. Pliny Earle. Among the pioneers and co-workers in behalf of the insane in this country during the present century are Kirkbride, of Pennsylvania; Stribling, of Virginia; Nichols, of Massachusetts; Grey, of New York; J. Preston Jones, W. W. Godding and Miss Dix, first to suggest the founding of the Government Hospital for the Insane of the U. S. Navy and Army, and who also subsequently prevailed upon the governments of Europe to institute hospitals on the principle of those in America, which have contributed to rescue from a state of misery hundreds of the human race who would otherwise have died hopeless and forlorn. It is to be deplored that neither the State medical magazines or the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION take any special interest in the subject of insanity, though the regular practitioner in town or country may occasionally receive the annual reports of such hospitals. Few medical colleges give instruction on the subject. Neither at the Universities of Virginia or New York is it embraced in the curriculum of study.

Happily, within the scope of the proposed Department of Public Health, recommended by the Committee of the AMERICAN MEDICAL ASSOCIATION, there is a clause to ascertain the extent, the origin and classification of insanity in the several States and territories of the country. In connection with the origin of insanity, it may be added that the Bible is not silent on the subject. In the Old Testament, when the Jews, the chosen people of God, incurred His displeasure, among other judgments inflicted was insanity; an example of which was presented in the person of the haughty King of Babylon. At the period of the New Testament times, when the Great Physician, the Savior, was on earth, mankind were submitting the insane to a most cruel and pitiable condition; cast out from human society and counted as possessed of devils as was the raving maniac of the tombs; no worse spectacle of misery in human guise could be presented when, by the magic presence and word of Christ all was changed, and the miserable victim afterward was found clothed and in his

right mind. From that era to the present century, Christian men and women have sought in every way to ameliorate the condition of this class. The so-called bedlams of England and the jails and reformatories where such were confined, have given place to the more rational methods of hospital treatment, carried out by enlightened physicians. Among hospitals abroad and here, which the writer was privileged to visit and inspect, were some of those in France, England and Canada. The Salpêtriere in Paris at the time had M. Charcot as superintendent. His patients were healthy in appearance, well clad and many usefully occupied. Recreation and amusement were prime factors which this eminent alienist employed to recover his patients. To the Quakers belong the credit of establishing the first building in America—a wing of the Pennsylvania Hospital being appropriated for the care of insane patients—thereby antedating by a half century a like provision in Great Britain. Among the institutions of the kind in England may be especially named the Royal Naval Hospital at Great Yarmouth, where according to the tables prepared by Dr. J. D. Gatewood, Surgeon U. S. Navy, the mortality averages 10 per cent. Since the late Dr. Seguin inaugurated a work in behalf of imbeciles, fifteen States of the Union have made provision for this class, aggregating 4,000 unfortunates. In 1879 the first hospital for the colored insane of Virginia was located at Petersburg, Va.

The late Report for 1893, of the Superintendent of the State Hospital for the Insane at Staunton, Va., gives the following statistics, viz.:

Male inmates, 338; females, 326; total, 659.

Admissions for 1892–3: Males, 76; females, 61; total, 137. Of these, 41 were re-admitted.

Per cent. of recoveries, 56; of deaths, 0.6. Since founded, 1827 to 1893, total number admitted, 4,666.

Phthisis pulmonalis caused the largest number of deaths. The report emphasizes the value of employment and amusements, always followed by gratifying results. Of 936 patients of the Pennsylvania Hospital 454 are classed under mania; 333 under melancholia; 142 under dementia. At the Salpêtriere Hospital, already referred to, of the 2,005 cases considered curable, 604 were cured in the first year, 497 in the second; 71 in the third, and 46 in the seven years following; in all 1,218 in ten years.

The report of the Surgeon-General, Dr. James K. Tryon, U. S. Navy for 1893, under the head of insane of the Navy, the Government Hospital for the Insane gives the number remaining in the Hospital Sept. 30, 1892:

| | | |
|---|---|---|
| Remaining Sept. 30, 1892 | | 75 |
| Number admitted to June 30, 1893 | | 10 |
| Total number | | 85 |
| Total number discharged to June 30, 1893: | | |
| Recovered | 3 | |
| Improved | 1 | |
| Died | 9 | |
| Total number | | 13 |
| Remaining June 30, 1893: | | |
| Officers | 6 | |
| Enlisted men and marines | 66 | |
| Total | | 72 |
| Force afloat: Cases of insanity, 1892: | | |
| Dementia | 1 | |
| Mania | 6 | |
| Melancholia | 5 | |
| Total | | 12 |
| Navy Yards and Stations, 1992: | | |
| Dementia | 4 | |
| Mania | 3 | |
| Melancholia | 2 | |
| Total | | 9 |
| Naval Hospitals: | | |
| Dementia | 2 | |
| Hypochondriasis | 1 | |
| Mania | 3 | |
| Melancholia | 11 | |
| Total | | 17 |

Thus allowing, according to the Report, 10,000 or more officers and seamen of the Navy, one-tenth of this number to be admitted in one year for treatment for insanity, as already stated for 1892–93, the proportion is relatively small, considering the exposure to disease, accidents and injuries common to the naval service. In this connection it may be added that as a case of an inebriate officer of the U. S. Army was committed to the Government Hospital for the Insane for treatment, the fact is suggestive that Army and Navy authorities may properly recommend the founding of a hospital for inebriates.

### THE TREATMENT OF INSANITY.

Every enlightened physician concedes the importance of an early recognition of a case of insanity, and the commitment of the patient to hospital *regimé*. Unluckily as yet, public sentiment is against such decision, and too often the family physician yields through fear that he may offend, knowing that by some to be insane is deemed a disgrace and certain to be followed by loss of reputation. Hence the golden opportunity for proper treatment is lost, diseased action is allowed to proceed unchecked until diseased organization has taken place and the patient has become incurable. Dr. Forbes Winslow on "Obscure Diseases of the Brain," says: "It is a fact that 70, if not 80 per cent. of cases of insanity admit of easy and speedy cure, if treated in the early stage with proper remedies, and there be no strong constitutional tendency to cerebral affections or cranial malformation." The acceptance of the doctrine of modern times, that insanity is a disease of the brain and should be treated as a physical illness is vitally important, because of the large increase of insanity. For example, in 1844 there were 20,000 insane people in England, about 1 in 800; in 1871 there were 56,000, or 1 in 400 of the population of that country. Its occurrence may be looked for where heredity exists after an acute illness of typhoid, puerperal or other fevers, meningitis and shock incident to severe injuries of the head—especially if the patient be intemperate or a brain worker. The regular physician of such cases should not lose sight of them, since disastrous consequences may follow such neglect. The writer recalls in his practice the case of a bright youth, 17 years of age, whose malady was hypochondriasis with neurasthenia; he committed suicide by taking laudanum. His mother, the widow of a Virginia judge, had often been advised to commit him to a hospital, but in vain.

With the help of modern pharmotherapy, the physician can dispense with the crude, if not harsh, remedies and appliances formerly resorted to in the treatment of the insane, especially when carried out by the gentle, intelligent and trained nurse, whose services are now to be commanded even in private practice. The locked doors, the barred windows and padded chamber walls of the asylum are still necessary, but the skilful use of the hypodermic syringe charged with the needed duodyne, whether to insure sleep, to avert a paroxysm or to induce an alvine motion, now well-nigh supersede the resort to coer-

cion, oral medication or the straight jacket, which tended to excite cerebral exacerbation and delayed recovery. The use of the hot bath, as hot as can be borne, for its anesthetic effects can not be too urgently recommended, when aided in acute cases by the free use of sulfonal and phenacetin; the latter combined with caffein promptly relieves insomnia and suffering—without the after effects of the opium salts.

Where urotoxemia exists in chronic forms of insanity with symptoms of parenchymatous nephritis, accompanied by debility and loss of appetite, the free use of bicarb. potass., the mercurials, cod liver oil, Fellows' hypophosphites or the compressed tablets of the Hypophos Company, prepared by H. K. Mulford, chemist, Philadelphia, are invaluable as a tonic and restorative of the enfeebled nerve action of the digestive organs, as well as of the brain. As an article of diet, the fluid beef, such as is prepared by Libby, McNeil & Co., of Chicago, can not be excelled. During the stage of convalescence the system of furloughs may be practiced with advantage; the patient being always commended to the care of some medical friend, and the time for his return to the hospital should be distinctly stated by the authorities.

## LEGISLATION FOR THE PREVENTION OF BLINDNESS.

Read before the Chicago Medical Society, April 15, 1894.

BY BOERNE BETTMAN, M.D.

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The object of this paper is to call the attention of the Society to the need of legislation for the prevention of blindness. The necessity for adopting such a measure can only then be advocated when sufficient data have been collected, indicating the cause and increase of blindness, and then demonstrating that legal restrictions would decrease to a large percentage this awful calamity. A thorough elucidation of these facts would tend towards elaboration. I will content myself, therefore, by bringing to your attention in a concise form, the main features only. If we consult the United States census from the year 1850 to date, we learn that the number of blind enumerated during the various decades is as follows: 1850, 9,794; 1860, 12,658; 1870, 20,320; 1880, 48,928; 1890, 50,411.

If compared with the population, which increased from 23,191,876 in 1850 to 62,622,250 in 1890, we obtain the following ratios:

Number of blind to 1,000,000 of population: 1850, 422; 1860, 403; 1870, 527; 1880, 976; 1890, 805.

As we are especially concerned about our own State of Illinois it will be interesting to ascertain the number of blind allotted to us in the records quoted. The following table comprises both the total number of blind for each period and their ratio to 1,000,000 of the population:

Number of blind in the State of Illinois: 1850, 264; 1860, 476; 1870, 1,042; 1880, 2,615; 1890, 2,834.

Number of blind to 1,000,000 inhabitants: 1850, 310; 1860, 278; 1870, 410; 1880, 850; 1890, 741.

It will be observed that the proportion of these sadly afflicted has greatly increased, notably so in 1880, and again decreased in 1890. These apparent inaccuracies are due to the methods of enumeration adopted, and are fully explained in the following words of Dr. Wines, quoted from the Report of the Board of Public Charities of Illinois, 1892: "With regard to the so-called "defective" classes, it should be known that Dr. Wines, in 1880, supplemented the enumerators' returns by correspondence with physicians, who added many names to the lists. This correspondence was not renewed in 1890, which accounts, at least in a large degree, for the seeming slight falling off in the ratio in 1890."

The above figures will suffice to prove the existence of a large class in our community whose infirmity makes them dependent upon others. Deprived of, perhaps, the most important sense, their mode of education and subsequent training demand the existence of schools and workshops equipped with all the requirements of a model blind asylum and industrial school. The large outlay of money this entails can only be undertaken by the State. The total amount appropriated for the blind asylum in Jacksonville from 1849 to 1891 was $1,156,690.50. Dr. Howe states that the blind of the State of New York costs directly and indirectly over one million and a half of dollars yearly. If computed for the entire civilized world, the sum would reach an enormous amount.

If we regard the question from a philanthropic standpoint, we become so thoroughly alive to the helpless condition of our crippled brethren that our hearts go out to them in sympathy, and every human sentiment is aroused not only to better their state, but to improve the condition of affairs which in a large measure is responsible for their affliction. Physicians can not deal much with sentiment. Our skeptic science calls first for research, and then for the practical application of our investigations. We will therefore, next inquire into the causes of blindness and later on its preventive measures.

Valuable statistics have been compiled, both in this country and in Europe, with reference to those questions which are the results of much labor and patient searching inquiries. Magnus[1] collected 2,528 cases of bilateral blindness which, when grouped under four heads, attribute 3.77 per cent. to congenital blindness, 66.50 per cent. to idiopathic diseases of the eye, 10.73 per cent. to injuries, and the remaining 19 per cent. to diseases of the body which affect the eyes secondarily.

I could multiply these statistics by referring to those collected by Cohn, Krückow, Skrebitsky and others. Those I have quoted will suffice for illustration. The above figures clearly indicate that in order to prevent loss of sight in a great proportion of cases, our efforts must be concentrated in one direction. Congenital defects of the eye and ocular lesions due to bodily ailments are comparatively few. They necessarily are not so amenable to preventive measures as are those caused by idiopathic diseases of the eyeball and injuries of that organ. The latter can frequently be ascribed to carelessness and defy intervention. The second category of cases, those resulting from primary diseases of the organ of vision demand our special attention, for they comprise the largest percentage and come directly within our sphere of action. An analysis of this group will demonstrate that blennorrhea neonatorum must be responsible for the largest quota, almost 11 per cent.

[1] Die Blindheit, ihre Enstehung und ihre Verhütung, Breslau, 1883.

If statistics of the youthful blind, such as are found in our blind asylums, are tabulated, the percentage of blindness due to infectious infantile disease rapidly increases. Thus Reinhardt[2] found 30.39 per cent. in a material of 2,165 individuals, inmates of twenty-two blind asylums. Claisse, of Paris, 46 per cent.; Katz, of Berlin, 41 per cent., and Magnus, of Breslau, 34 per cent.

Having shown that blennorrhea neonatorum is responsible to a great extent for blindness in the young, the question will naturally arise: Can this disease be prevented, and if so how? We all know that it can, and every intelligent physician has heard of and should conscientiously carry out the prophylactic measures known as Credé's and Hausmann's methods. Hausmann aims at cleanliness and strives to render the tract through which the newborn child must pass, aseptic, and thereby prevent infection of the conjunctiva. Credé, on the other hand, aims at innocuousness of the germs which may have lodged in the conjunctival sac. Since it is impossible to determine at birth of the child whether infection has occurred or not, all eyes are subjected to the same prophylactic treatment. A single drop of 2 per cent. solution of nitrate of silver is dropped between the lids of *every* newborn child. The proof of the efficacy of this procedure is presented in the following figures borrowed from Fuch's work, page 129.

| Author. | Before introduction of Prophylaxis. | | | After introduction of Prophylaxis. | | | |
|---|---|---|---|---|---|---|---|
| | Total number of newborn. | Cases of blennorrhea. | In per cent. | Prophylactic method. | Total number of newborn. | Cases of blennorrhea. | In per cent. |
| Abegg[3] | | | | Cleansing with water | | | 3 |
| Schirmer[4] | | | | Dry cleaning | 50 | 0 | 0 |
| Bischoff[5] | | | 5.6 | Salicylic acid | | | 2.6 |
| Olshausen[6] | 550 | 69 | 12.5 | 2 per cent. carbolic acid after tying cord | 137 | 12 | 8.8 |
| Olshausen | | | 2 | per cent. carbolic acid sol. before ligating cord | 166 | 6 | 3.6 |
| Kruckenberg[7] | 1266 | 92 | 7.3 | 2 per cent. carbolic acid sol. before ligating cord | 82 | 11 | 13.4 |
| Konigstein[8] | 1092 | 51 | 4.8 | 1 per cent. carbolic acid sol. before ligating cord | 1541 | 21 | 1.4 |
| Credé[9] | 2897 | 314 | 10.8 | 2 per cent. argentum nitricum solution | 1160 | 1-20 | 1-02 |
| Konigstein | | | 2 | per cent. argentum nitricum solution | 1250 | 9 | 07 |
| Kruchenberg | | | 2 | per cent. argentum nitricum solution | 730 | 1 | 0.14 |
| Felsenreich[10] | 1887 | 82 | 4.3 | 2 per cent. argentum nitricum solution. (First period of time in use | 3000 | 58 | 1.9 |
| Felsenreich | | | 2 | per cent. argentum nitricum solution. (Second period of time in use) | 2100 | 21 | 1.0 |
| Ressel,[11] | | | | 2 per cent. argentum nitricum | | | |
| Simpson | | | 11.76 | solution | | | 5.0 |
| Bayer[12] | 1100 | 136 | 12.3 | 2 per cent. argentum nitricum solution | 361 | 0 | 0 |

Should this disease make its appearance, notwithstanding the introduction of preventive measures, or owing to a lack of their enforcement, it can be treated and vision saved in the great majority of cases, provided the physician's attention is called to it at an early date. This disease calls for prompt interferference. Delay of a few hours is often dangerous. Ulceration of the cornea and loss of sight can in most instances be avoided, provided the proper remedies are applied at the very onset of the inflammation. That this is not done and that the dictates of Credé are not complied with in many, often too many instances, is a fact known to every physician and especially to oculists of some experience. In large cities and in the country, midwives lawfully attend to confinements and, unfortunately, also, to the inflamed eyes of the babes. The last "Official Register of Midwives" for the State of Illinois contains a list of 1,152. Of these, 700 are located in the city of Chicago. Of the 28,742 births recorded in Cook County last year, over one-half, I have been assured by the registrar of births, were reported by midwives. We all have come in contact with the results of their ministrations. The usual popular remedies, such as instillation of breast milk, camomile tea and other noxious agencies are applied to the swollen, suppurating lids, and only after the loss of precious time when complications have arisen, the physician is at last, and unfortunately too late, consulted. Such sad examples of ignorance and criminal negligence have come under my notice dozens of times. Very often the charge of carelessness must be laid at the door of the parents. Either ignorance or penury induce them to listen to the advice of foolish counselors. It can not be said with a shrug of the shoulders that they themselves reap the harvest of their sowing. The innocent child whose future life is blighted is thrown upon the care of society at large and becomes a burden to the State. It might be said that midwives should be taught to carry out the safeguards referred to. But they are not, and furthermore, persons who are not acquainted with the first principles of medicine can not possess the requisite knowledge and should not be permitted, except for unavoidable reasons, to assume charge of so dangerous a disease. Many otherwise well-qualified practitioners are not capable of coping with it; surely a midwife can not be intrusted with its care. In such communities, where the population is sparse and medical men few, the treatment must be intrusted to the midwife, over whom the State Board of Health should exercise vigorous control by refusing a license, unless exact knowledge of this branch of their duties is shown. These detailed reasons prompted the authorities of Switzerland in 1868, of Prussia in 1878, Austria in 1882, and America in 1891, to force midwives and nurses to report inflammation of newborn babes' eyes at an early date, to call in the aid of a physician and thus prevent, to a large extent, blindness.

This brings us now to the essential feature of this paper, or as Dr. Howe in his address, read at the forty-fourth annual meeting of the American Medical Association, says: "What means can be adopted to bring these children as soon as possible to the notice of a competent physician? Education of the laity is useless, urging the nurses, professional or others, is equally insufficient. It remains only to place the responsibility at once where it belongs, by imposing upon such persons a severe penalty. The surest and best means of accomplishing this is undoubtedly by legislation."

New York was the first State in the Union to take up this subject, and through the untiring efforts of Dr. Lucien Howe and his colleagues, both Houses of the Legislature of 1890 passed, without a dissenting vote, the following Act known as Chapter 41 of the Laws of 1890.

[2] Dr. Ernst Fuchs. Die ursachen und die Verhütung der Blindheit, 1885.

[3] Nagels Yahresbericht f. Augenh. für 1881, p. 337. [4] Citirt von Königstein. [5] Horner. Handbuch, der Kinderkrankheiten herausg. von Gerhardt V. B. 2 Abth., p. 264. [6] Berliner klin. Wochenschrift, 1881, Nr. 8, [7] Archiv. für Gynäkologie XXII, B. p. 329. [8] Archiv. fur Kinderheilkunde. III. B. 1882. [9] Archiv. fur Gynäkologie XXI. B. p. 181. [10] Weiner med. Wochenschrift, 1883, Nr. 35. [11] Annales d'oculistique, XC. B., p. 145, Scheint die Catabe mit den Blennorrhoen gezählt zu haben. [12] Archiv. für Gynäkologie XXX B.

AN ACT FOR THE PREVENTION OF BLINDNESS.

SECTION 1.—Should any midwife or nurse having charge of an infant in this State, *notice* that one or both eyes of such infant are inflamed or reddened at any time within two weeks after its birth, it shall be the duty of such midwife or nurse so having charge of such infant, to report the fact in writing, within six hours, to the Health Officer or some legally qualified practitioner of medicine of the city, town or district, in which the parents of the infant reside.

SEC. 2.—Any failure to comply with the provisions of this Act, shall be punishable by a fine not to exceed one hundred dollars, or imprisonment not to exceed six months, or both.

SEC. 3.—This Act shall take effect on the first of September, Eighteen Hundred and Ninety.

The word *notice*, in the first sentence was omitted in a similar law enacted in Maine in 1891, and known as 97 of the Senate.

This law reads as follows:

SECTION 1.—Should one or both eyes of an infant become reddened or inflamed at any time after birth it shall be the duty of the midwife, nurse or person having charge of said infant, to report the condition of the eyes at once to some legally qualified practitioner of medicine of the city, town or district, in which the parents of the infant reside.

SEC. 2.—Any failure to comply with the provisions of this Act shall be punishable by a fine not to exceed one hundred dollars or imprisonment not to exceed six months, or both.

SEC. 3.—This Act shall take effect on the first day of June, 1891.

Rhode Island only lately, in 1893, followed the good example of her big sisters by an enactment practically similar to theirs. I will again quote Dr. Howe to answer a question which has been repeatedly put to me and to which he so pertinently and concisely replies. He says:

"A question might arise as to what advantage it is to oblige nurses and midwives to report a disease of which a certain class of so-called doctors are almost as ignorant as the nurses themselves. The answer to this is three-fold: 1, the nurse is made to appreciate her responsibility, not only in that case but in others, and to know that the condition indicated by redness and discharge is not anything to be trifled with; 2, the parents also become alarmed when they know the disease is sufficiently serious to be the subject of special legislation, so that in choosing a practitioner they select with rather more than ordinary care. Finally, as for the physician himself. If he accepts the case he feels that he must understand it thoroughly, and he will be apt to look it up with considerable care in text-books and treat it intelligently. Above all, if he fails to do that, the parents have a responsible individual against whom they can, with perfect justice, enter a suit for malpractice, and if he has proved himself incompetent, he not only suffers the penalty which a law has provided for him, but one such case would be an example to him and to other practitioners in the community in which it occurred."

And now we are confronted with the momentous question, Whether the great State of Illinois which has shown itself so willing and prompt to champion the cause of all worthy enterprises will be behindhand in this deserving undertaking. I think not. It remains only for us, the physicians of this commonwealth, to show by united action and unanimous indorsement, that we favor the immediate enforcement of such legislation. The representatives will then be convinced of the need of such a measure, and no doubt will readily make it a law. At the March meeting of the Chicago Society of Ophthalmology and Otology, my paper on "Legislation for the Prevention of Blindness" called forth an animated discussion, which resulted in the adoption of the following resolutions:

WHEREAS, Statistics compiled in this country and in Europe demonstrate that fully 25 per cent. of our blind owe their affliction to an inflammation of the eyes appearing a few days after birth; and

WHEREAS, Experience has proved that the inflammation can be cured and the eyesight saved in the majority of cases if treatment is instituted at an early stage of the disease; and

WHEREAS, The destruction of the eye and blindness are usually the result of delay in treatment; be it

*Resolved*, That we heartily recommend that the people of the State of Illinois represented in Senate and Assembly, do enact as follows:

SECTION 1.—Should one or both eyes of an infant become inflamed, swollen, or reddened at any time within two weeks after its birth, it shall be the duty of the midwife or nurse having charge of such infant, to report in writing, within six hours to the Health Officer or some legally qualified practitioner of the city, town or district, in which the parents of the infant reside, the fact that such inflammation or swelling or redness of the eyes exists.

SEC. 2.—Any failure to comply with the provisions of this Act shall be punishable by a fine not to exceed two hundred dollars, or imprisonment not to exceed six months, or both.

Committee: F. C. HOTZ, M.D., LYMAN WARE, M.D., BOERNE BETTMAN, M.D.

I think this Society should put itself on record and aid the cause by passing resolutions to the same effect. We thus not only indicate to the world our approbation of preventive medicine, but give a moral support to the instigators of this movement.

## RUPTURE OF THE UTERUS DURING LABOR.

Read before the Cambridge Society for Medical Improvement, April 23, 1894.

BY EDMUND SCOTT DOW, M.D.
ALLSTON, MASS.

I wish to call your attention to this subject tonight, owing to a case which I saw recently in consultation with a physician who gave me the following history:

"Mrs. X., age 33, 4-para, her youngest child being 7 years old. Her previous labors had been normal, never needing even the use of forceps. At different times during the last few years she has been in a hospital for some uterine disease, but has never had an operation, although one was advised for a laceration of the cervix. Her term of pregnancy has been uneventful, except she was said to be subject to faint spells but was able to attend to her family cares and to take out-of-door exercise. The membranes ruptured on a Wednesday night, but labor pains did not start until eight days later at about 7 in the morning. During this past week the waters had continued to drain away. The labor continued uneventful until nearly noon, when the os was fully dilated and, as the labor pains seemed to diminish, I thought best to deliver by forceps and so asked for counsel."

When I saw her about 12:20 P.M. she was in a very critical condition from loss of blood, which bleeding must be internal, as there was very slight hemorrhage externally. She was pulseless, cyanosed, with sighing respiration, limbs cold, and covered with clammy sweat.

On examining per vaginam the head was found low down, the os fully dilated and the cervix wholly taken up. The patient was given hypodermic injections of brandy and ether; a slight amount of ether was given her and a stillborn male child of ten pounds was

easily delivered by forceps. The placenta was not easily expressed and so the doctor tried to take it manually. Meanwhile I was busy with hypodermic stimulations, to which the patient did not respond, and I was asked to try for the placenta. On examination the hand passed readily into the abdominal cavity through a rent in the side of the uterus, and the intestines could be easily felt. Here, then, was the cause of the collapse. The placenta was readily removed from the uterus and the uterus pressed down and contracted, but the patient expired a few minutes later.

The postmortem examination was made twenty hours after death; *rigor mortis* still present. The abdomen only was examined. The abdominal cavity was found to contain a large amount of fluid and the uterus was fairly well contracted. The uterus and its appendages were removed and found to contain a tear on the left side, extending from the mouth to the Fallopian tube, but not involving it; a tear fully five inches in length.

Rupture of the uterus during labor may be one of two kinds; either spontaneous, or that due to manual or instrumental force. As to the cause of rupture, in a general way, it may be said that uterine contraction causes it. Of course the effect of uterine contractions in normal cases is the expulsion of the fetus; but if the child meets an obstacle such as a contracted pelvis in the mother, or from abnormal size of the child itself, then continued hard contractions end in rupture of the uterine walls. Again, the improper use of ergot, as in the first stage, has been known to be followed by rupture.

The frequency with which cases of rupture occur seems to vary much according to different authorities. Ramsbotham puts the proportion as 1–4,887, Bandl 1–1,200, and Dr. Jolly, of Paris, says 1–3,403. In 1880 Dr. Harris, of Philadelphia, made a careful study of the subject, especially as regards the frequency in the United States, and he says that many physicians see several thousand cases of labor without meeting a single case of rupture, and he concludes the proportion is 1–4,000. There is no doubt that many cases occur which are not reported, even if recognized at the time, for the symptoms of rupture are not the same in each case. In the one case the tear may occur in one pain and be so extensive that the fetus would go into the abdominal cavity, when acute pain followed by collapse and recession of the presenting part would occur; while in another case the rupture would take place by degrees, the tear would not be so extensive and the pain of tearing would be so masked by the pain of labor that the condition would not be recognized until too late. Thus it will be seen that the accident, fortunately rare, may be much more frequent than these figures would show.

That the accident happens much more frequently in multiparæ, admitted by all writers, is partly on account of the thinning and weakening of the walls in successive pregnancies and on account of the increase in size of later children. One writer speaks of the greater number of shoulder presentations in multiparæ as a cause of rupture.

The extent of the tear may vary from one or two inches, to such size that the entire fetus escapes into the abdominal cavity. As to degree, the rupture may be complete or incomplete; complete if the tear extends through the walls to the abdominal cavity, and incomplete if it involves the muscular layer only, the peritoneal coat remaining intact, in which case there is no hemorrhage into the abdominal cavity, but may be very grave hemorrhage into the surrounding tissue.

Rupture of the uterus is one of the gravest accidents of labor. Occurring, as it does, at a time when all seems going well, and when the family and friends are expecting a speedy cessation of the labor and the advent of a new life to the home, the blow seems doubly severe. The child is almost invariably stillborn, and the mother is put in jeopardy of her life through shock and hemorrhage, and if she survive these she is in great danger of septic infection.

As to treatment two factors are to be considered: 1, how shall we extract the child? 2, how treat the tear?

As to the first question, most authors now agree that if the rupture is complete and the entire child has passed into the abdominal cavity, then do laparotomy; the same treatment is indicated if part of the child has passed through and the rest is so high up that the presenting part can not be readily reached. If the presenting part is low down and easily reached, then deliver through the natural channel. If the head is low down, use forceps; if not successful with forceps, perforate and use craniocast. If transverse presentation, do embryotomy; if arm is down, do decapitation. Version is not permissible, for the tear, if small, is increased by so doing, and if subperitoneal it is made perforating and hemorrhage is thereby increased. The placenta should be removed manually and not expressed. If the placenta has passed through the tear and is not found, then do laparotomy.

How are we to treat the tear? Different views are held by different observers. If laparotomy has been done and child removed from the abdominal cavity, some prefer to sew up the tear; others to remove the uterus entire and drain through the abdominal wound or through Douglas' pouch. If delivered through the natural channels many authors believe in laparotomy in cases of complete rupture, in order to secure drainage. Others prefer to treat these cases by tampon and drain through vagina. Statistics show better results by the latter than by the former method.

In cases of incomplete rupture almost all authors prefer the tampon, although many prefer laparotomy, as they claim that otherwise you can not control hemorrhage. In case of rupture, should laparotomy be done immediately with danger of adding the shock of an operation to that of the rupture, or is it better to tampon the vagina to control hemorrhage and wait until the patient rallies from the shock? Mortality is much greater by the immediate plan.

I bring that subject to your notice this evening, that there may be free expression of opinion as to the proper course for us to pursue in a case which may occur at any time in a family where we have not all the facilities for doing a grave operaiion. The saying is that "grave emergencies demand bold measures," and the physician will have to bear some blame in a case of this sort, no matter how careful he may be.

DISCUSSION.

DR. NORRIS had one case of rupture of the uterus in a young woman 25 years of age, in a twin pregnancy, at full term. Labor had been delayed all day and at evening assistance was called and an attempt made to deliver. A child with presenting head was taken with forceps, when the mother apparently became exhausted. The second child was delivered by turning, after which the woman went

rapidly into a state of collapse and died. An examination showed a rupture of the uterus, which the doctor attributes to a long delay in the delivery and the act of turning the child.

Dr. Taylor asked in what per cent. of cases of ruptured uterus has laparotomy been performed and how many have recovered?

Answer. The per cent. of cases operated upon is unknown; about 50 per cent. of the cases operated upon have recovered. A case in the practice of Dr. Ed. Reynolds recently was treated expectantly and recovered.

Dr. Horace Marion saw a case in consultation some time ago which proved fatal.

Dr. M. Brown, seventeen years ago, had a young Irish patient, primipara, in labor, where there was a great obliquity of the uterus and owing to which he expected trouble. The woman had a severe pain while in a standing position and shortly afterward went into a state of collapse. Examination showed a rent in the uterus and the child in the abdominal cavity. The child was delivered and then the placenta, but the bowels protruded and the woman died the next day. This was a case which might have recovered had an early laparotomy been performed. A very remarkable case of repeated rupture of the uterus has been reported by Dr. Row, of W. Lyndonville, N. Y., where in four consecutive pregnancies the uterus has ruptured during labor, and yet the child has been successfully delivered. The great obliquity of the uterus is emphasized by Dr. Brown as a cause of rupture.

Dr. A. P. Clarke had one case, twenty years ago, in a 4-para. He was called in the afternoon and found the patient in the first stage of labor, with some pain, and the os undilated; in the evening there was some dilatation of the os and the head was found presenting. The patient got out of bed, was seized with a pain which was very hard, and then became collapsed and bloodless. Dr. Wellington was called in, but the patient died before he arrived. The hand passed into the abdominal cavity through the uterus, felt the head of the child. There did not seem to be much hemorrhage present; the woman apparently died from shock. In his case, laparotomy would have been of no avail.

Dr. Driver was called to see a woman who had been in labor all day. On the right the uterus appeared to be very thin, and on the left there was a hard mass. He passed his hand up the vagina and found the uterus was ruptured and the child lay in the abdominal cavity. The woman did not appear to be suffering much from shock or hemorrhage. The child was delivered through the T-shaped rent in the uterus and the placenta expressed. There seemed to be no tendency for the tear to close by uterine contraction, and the patient died twenty-four hours after the accident. As he looks back on the case, it seems to have been one where the life of the patient might have been saved by opening up the abdomen, cleaning it out and closing the wound in the uterus.

Dr. Marcy said the blood supply of the uterus during pregnancy is very great and the hemorrhage must be greatly increased, as well as the size of the rent, by dragging the child through this avenue into the world. A rapid laparotomy should be performed. Dr. Marcy was called to a case of pregnancy where the labor was complicated by a large fibroid, weighing seven pounds; the physician in charge had turned the child and attempted delivery by the feet, and in doing so had torn the head from the body and let it remain at the fundus above the tumor. As it could not be removed by the usual channel there was only one thing to do, a laparotomy. The abdomen was opened and the head delivered by an incision in the uterus, but the patient died.

## PROLAPSE OF THE IRIS. (HERNIA IRIDIS.)—A CASE OF SUCCESSFUL REDUCTION.

Read before the Tri-State Medical Society of Alabama, Georgia and Tennessee.

BY FRANK TRESTER SMITH, A.M., M.D.
CHATTANOOGA, TENN.

The case before you, David Lucas, of Chattanooga, came to my office September 20 with a history of having been struck in the right eye half an hour previously with a piece of steel. Inspection showed a pear-shaped pupil with the point downward and inward, with the iris prolapsing through a linear wound at the margin of the clear cornea. A solution of sulphate of eserin was instilled into the eye and the patient sent home. Two hours later the prolapse was pushed inside the eye with blunt point of a small squint hook. The iris was freed from the wound except a small part which was adherent to its inner side and it was thought that further use of eserin would reduce this more safely than further manipulation. The pupil was almost circular but was still drawn to a point. Eserin was used for several days, the eye was kept bandaged and quiet enjoined on the patient. The eserin gradually drew the iris from the cornea but in so doing its anterior layers were torn loose and remain incarcerated in the wound. This can be readily seen by direct inspection. In the dark room a red reflex can be seen through this rent, nearly as bright as through the pupil. This interferes with the function of the eye in no way. The vision is 20–15, the same as the other eye. The pupil is now circular. You will notice that at the periphery of the iris the striations are absent, the black pigment can be seen, and by looking obliquely part of the iris is observed adherent to the cornea.

In the diagnosis of hernia iridis, the distortion and displacement of the pupil are important points. The prolapse can not always be distinguished from a foreign body especially if covered with exudation. Attempts at reduction, as a rule, do not succeed, because the surgeon is not consulted at an early period after the injury. This is the only successful case I have ever seen reported. Within a short time an exudate is poured out which prevents the return of the iris effectually. In such cases practice differs, many oculists advising excision; others advocating that it is better to let it alone. The use of eserin is contraindicated if there is any tendency to iritis.

Prognosis is doubtful, generally, most cases recovering with good or fair vision; others result in an inflammation which destroys the interior structures of the eye. All cases of this kind should have the best expert attention available.

## CHROMICIZED CATGUT AS A MEANS OF DIRECT FIXATION IN THE TREATMENT OF FRACTURES AND OSTEOTOMIES, WITH A REPORT OF A CASE.

BY F. W. JAY, M.D.
COLUMBUS MEMORIAL BUILDING, CHICAGO.

Without attempting to depreciate the mechanical value of unabsorbable material as a means of direct fixation of the bone fragments in operations performed for the cure of fracture, the writer believes that bone repair is accomplished more rapidly and satisfactorily in the absence of foreign bodies from the bone. He is further convinced that in many cases in which some form of direct fixation of the fractured ends is required, a comparatively readily absorbable material will suffice. Consequently this case, an ununited fracture of the femur of one year's standing, in which some immediate mechanical support was required to retain the bone ends in apposition, and in which sutures of chromicized catgut met the requirements perfectly, is reported.

From the conditions found at the operation, and the methods adopted to secure fixation and union, some points of practical value may be gathered.

Histological research has demonstrated facts in

regard to bone growth and bone repair, that should indicate to surgeons operating for the cure of fractures the value of details in the operative procedures which will greatly aid the *vis medicatrix naturæ*, and in the use of material of but temporary mechanical value we must carefully carry out all procedures that will aid nature's resources, in the accomplishment of bone repair. The case also demonstrates the operative procedures necessary to faithfully carry out operations with absorbable material, which will enable the temporary fixation to serve its purpose, and without which it is valueless.

Each detail of an operation performed for the cure of an ununited fracture, may prove of decisive value in obtaining union; and it was by the minor steps in the operation, as they are by some regarded, that union was effected in this case. As Senn says: "Brilliant operators are not always the best surgeons. The best results in surgery follow the one who is the most painstaking in following out the minutest details."

Considering the periosteum, or its inner layer, the cambium, and the endosteum as the two principal regions of bone, in which are found myeloid tissue with its bone-producing cells, or osteoblasts, the proliferation of which is to accomplish definitive union of fractured bones, (Virchow, C. O. Weber, Gurlt, Billroth, Volkman, Senn), we have in this case some points of interest and value demonstrated.

While definitive union between fractured bone ends is accomplished by proliferation of the osteoblasts of the compacta, as well as of the periosteum and marrow, the latter are regions in which are found bone-producing cells that are in a condition to respond more quickly to the requirements of repair by the early production of callus. These regions are the seat of osteoblasts in a constant and physiologic state of proliferation at the time the fracture occurs, and lose no time in initiating the process of repair. Kraft asserts that karyokinetic figures can be seen in the nuclei of the bone-producing cells of the periosteum twenty to thirty hours after the occurrence of fracture. Hence it is in these regions that we look for that early callus production that will allow of the use of such temporary fixation material as catgut. That such a process can take place promptly only under aseptic conditions is positive, as the method of repair of bone wounds is subject to the same division as the healing of any other tissue, *e.g.*, healing by primary and secondary intention, considering healing by secondary intention where the proliferating cells are compelled to combat infected and suppurating surroundings.

As this was the second operation performed for the cure of this fracture and a buried wire suture had been used in the first operation, which had been performed six months previous to the one reported, the condition of the bone in which this wire suture was found may demonstrate the tendency of *aseptic*, unabsorbable foreign substances in bone to expedite or retard the process of repair.

The word aseptic is italicised because, in regarding the action of unabsorbable material in bone, we shall consider the material used as being absolutely aseptic in aseptic tissue and not influenced in any way by the action of bacteria.

I consider the most thorough antiseptic precautions necessary when catgut is to be used for the direct fixation of bone fragments, although should suppuration occur at the seat of fracture it is a question if an unabsorbable foreign body when infected has not disadvantages that may overtop its mechanical virtues. In this paper we shall consider materials from their influence when aseptic. I believe in the ability of a conscientious and painstaking surgeon to prevent infection, and consider catgut in these cases a blessing to humanity made possible by antiseptic surgery. The possibilities of even aseptic foreign bodies in bone to determine subsequently the localization of bacteria flaating in the circulation is worthy of serious consideration from the influence which such bodies possess to vitiate the surrounding parts, and thus establish a *locus minorus resistentiæ*.

The fact that chromicized catgut was used for the direct fixation of the bone ends, and the more permanent fixation accomplished by the external dressing, and not by more decided means of direct fixation; such as bone or ivory pegs or wire sutures, etc., and less substantial external support, as extension, is, I think, suggestive.

What served to retain the fractured ends in this case until union was accomplished will not establish any surgical rules, yet the fact that such means did serve, and serve perfectly, must be of some value and indicates a rather ideal method to adopt in suitable cases.

HISTORY OF CASE.

A maiden lady, 28 years of age, of good previous health, sustained Oct. 14, 1892, a fracture of the right femur, at the juncture of the upper and middle thirds. She was taken to her home and treated by Buck's extension and long-side splints for eight weeks. As there was no union at this time, her physician advised the forcible rubbing of the bone ends together, as a means of expediting union. She, however, desired to obtain hospital care, and was admitted to one of the large hospitals of the city Dec. 6, 1892. Here extension was applied and retained until April 24, 1893, during a portion of which time she was subjected to a thorough administration of iodid of potassium. As union had not been accomplished at this time, more radical treatment by means of an open operation was advised and consented to. The operation was performed April 24, 1893. The ends of the fragments were denuded and freshened, and one wire suture was introduced through the fragments, the ends of the wire buried, and wound of soft parts sutured. Buck's extension was applied. Primary healing of wound of soft parts. Patient stated that she felt motion at the seat of fracture on the third day following the operation. The use of extension and long-side splint was continued until her discharge from the hospital July 31, 1893. She returned to her home with very great and free mobility at the seat of fracture, completely bedridden. No further treatment was employed until October, 1893, at which time Dr. Milton Jay, by whose kindness I report the case, being called to see the patient, advised another radical attempt to secure union by open operation.

The operation was performed at her home, Oct. 2, 1893. After a thorough preparation of the surroundings of the patient, and the site of the operation, an incision eight inches in length was made in the line of cicatrix, present as a result of the first operation, and the seat of fracture exposed. There had evidently been no attempt at callus formation, as the ends of the bones were conical in shape. They were considerably separated, freely movable, and covered

by cicatricial tissue. The upper fragment was abducted and firmly ankylosed at the hip joint. No attempt was made to produce motion at the hip joint, as the immobility of the upper fragment would prove a strong factor in aiding fixation; and if the upper fragment was brought to its proper axis, a recurrence of the abduction would in all probability occur. It was better treatment to bring the entire limb into a line with the upper fragment and restore the motion at the hip joint after union of the fracture. A wire suture was found in the exposed end of the upper fragment in a perfectly aseptic condition, it having pulled through the lower fragment. It was easily removed, as the bone surrounding it was extremely osteoporotic. In denuding the ends of the fragments, the tissue in immediate contact with the bone was stripped back from the ends of the bone but not removed. It was found that the cicatricial tissue covering the lower end of the upper fragment was but loosely attached to the exterior of the bone, and its separation caused no hemorrhage from the bone; in fact, the bone appeared avascular, and a fear was expressed as to the viability of the upper fragment, or, at least, its lower two inches. This fear was intensified when the medullary cavity was exposed. The marrow was found pale, granular and avascular, as no hemorrhage was excited by removing fragments of it. The tissue surrounding the lower two inches of the upper fragment presented no appearance of active healthy periosteum, but resembled this membrane converted into cicatricial tissue, and its capacity to produce callus by proliferation of the osteoblasts of its inner layer was doubtful. On sawing through the upper fragment, the vessels of the bone were found pervious, as hemorrhage was excited and the bone was therefore viable; but with the little prospect of active cell proliferation from either periosteum or endosteum of the upper fragment, the accomplishment of bone repair and union of the fracture appeared hardly possible. It was believed that the proliferating capacity of the structures in the interior of the upper fragment, in the condition in which they were found, would not be sufficient to produce new bone; but that by curetting the medullary tissue from the cavity, until more active tissue was exposed, a growth of granulation tissue would occur, and that this new tissue would contain active proliferating osteoblasts. By the growth of this granulation tissue into the medullary cavity of the lower fragment and its union with the apparently healthy medullary tissue in this part of the bone, with the subsequent laying down of new bone, union would be greatly facilitated. The medullary cavity of the upper fragment was therefore curetted for a distance of three inches from the exposed end until healthy and vascular tissue was exposed. With the loss of bone from two operations permitting of the greatest mobility and the small surface of bone in apposition, inactivity-atrophy having greatly diminished the diameter of the bone, it would have been impossible to have retained the fragments in apposition without some means of direct fixation.

The bone sutures in this case, were of chromicized catgut, carefully prepared and reliable, of moderate size and used double.

The bone was drilled and sutures passed through a drill-hole into the medullary canal, out at a corresponding drill-hole in the other fragment and tied.

There were four of these circumferential sutures applied. The end of the lower fragment was made slightly convex from above downward to fit into a corresponding concavity made in the lower end of the upper fragment, and when the sutures were tied, the bone ends were found to come perfectly into apposition with the limb abducted, into a line with the upper fragment.

The bone ends were in the apposition produced by a Fenwick's curvilinear osteotomy, which has been found efficient in preventing displacement, as well as having the advantage of sacrificing but a slight amount of tissue.

The atrophic and cicatricial periosteum of the upper fragment was stitched to the periosteum of the lower fragment, covering as completely as possible the break in the continuity of the bone. A most important detail in the operation is to provide a covering of periosteum for the line of fracture by suturing this structure carefully around the bone, thus incasing the space between the bone ends with an osteogenetic structure capable of filling the gap with new bone, as well as preventing the interposition of surrounding soft parts.

The slipping of the bone ends into a ferrule of decalcified bone, as advised by Dr. N. Senn, (*Annals of Surgery*, August, 1893) would prove a valuable aid to the reparative process, especially where it is found impossible to suture the periosteum over the line of fracture.

The wound of the soft parts was sutured from the bottom with several layers of buried catgut. This was done as carefully and thoroughly as could be, in order to obtain as early definite healing of the wounds of the soft parts as possible, especially in the immediate vicinity of the bone; the skin was sutured with catgut and a capillary drain of catgut applied in each end of the wound.

It will be evident that the incision in the soft parts was not only made ample, but that the bone ends were brought clearly into the wound and subjected to radical and thorough treatment. In operating for the relief of ununited fractures, the procedure must be most thorough and radical, being conservative only to a rational degree. The treatment of the bone ends, in such a case as the one here reported should consist in an absolute subperiosteal resection and the bringing together of bone capable of initiating and completing the reparative process. If the bone is subjected to such treatment as this, the aseptic cases of ununited fracture in which union will not be accomplished are rare.

Jacobson—Ununited fractures of the femur: "The large number of failures after operations for this condition are well known. The difficulties which may be present during and after these operations are very considerable; among them, sufficient exposure of the fragments and keeping the wound aseptic are most prominent." He recommends the use of wire sutures, either temporary or permanent, and to treat the wound open to allow of perfect drainage.

Treves—As regards wiring the fragments, says: "So far as the long bones of the extremities are concerned, I think that this measure may very well be dispensed with." It is said that this wire excites the growth of new bone, but if it does it appears to effect its end at a great cost.

"As a practical measure, the wire is a delusion and a snare, so far, certainly, as the long bones are concerned."

Treves does not make use of any direct fixation of the fragments, but makes a subperiosteal resection of the bone ends, and the careful application of an efficient external dressing. This, I am sure, in many cases, providing the treatment of the bone ends is radical, and Treves certainly accomplishes this, will make the use of unabsorbable material unnecessary; but I believe that by the use of bone sutures of chromicized catgut, or some other resisting absorbable material, with the additional procedure of suturing the periosteum over the line of fracture, we have greatly aided the process of repair.

If the presence of permanent buried aseptic, unabsorbable foreign material, used for the direct fixation of fractured bone ends, has a tendency, aside from the mechanical fixation, to expedite the reparative process in the bone, and the definitive union of the fracture, it must be due to the fact that the presence of such material in bone excites and retains a reparative process, and not a destructive one.

The presence of aseptic foreign bodies in bone must excite an osteosclerosis, and not an osteoporosis of the bone in order to *complete* the process of bone repair. All wounds of bone must heal by the formation of a bone cicatrix, of greater or less extent, and a bone cicatrix is formed of sclerosed bone. "But as soon as the fragments are fixed this union occurs, and ossification, running on to sclerosis follows."—*Green.*

Osteoporosis is an early step in the reparative process. "A rarefying osteitis begins probably immediately after the injury and results in a round-cell growth, which slowly eats away the walls of, and enlarges the Haversian canals."—*Green.* The value of this rarefying process in the early steps of bone repair is well demonstrated in the production of callus as a result of Brainard's drill operation.

The use of *temporary* ivory nails to expedite union of fractures, as recommended by Dieffenbach, is a valuable procedure, from the fact that their presence in the bone excites an osteoporosis at the seat of fracture, increasing the vascularity of the part and initiating the reparative process. After they have served this purpose they are a hindrance to repair. The continuation of this rarefying process is, if not actually destructive, at least inhibitory to repair, and will prevent the laying down of new bone in the immediate vicinity of the foreign body. To obtain union, requires the perfect completion of the reparative process; not the simple production of osteoporosis, but the subsequent proliferation of osteoblasts, with the final deposit of lime salts around the new cells. "Prompt bone union does not imply that the osteoblasts at the seat of fracture should undergo karyokinetic changes and multiply, but that the new tissue must be placed under the influences of favorable chemical conditions, which will enable it to be transformed into bone."—*Senn.*

In the case here reported, the wire suture has been present in the bone six months, in a perfectly aseptic condition, and the surrounding bone for a considerable distance was in an extremely osteoporotic condition, while the upper end of the lower fragment in which there was no wire suture was of almost normal density; the slight osteoporosis present in this fragment was simply that due to inactivity.

This suture should have been imbedded in bone scar, or osteosclerotic tissue, after six months influence, if such influence has a tendency to produce this condition in bone.

As far as the conditions found in this case are concerned they demonstrate what is true, that the presence of aseptic unabsorbable material placed in the bone to serve as direct fixation, when allowed to remain beyond a certain limit of time tends to prevent union by retaining in its immediate vicinity a condition of osteoporosis.

"The ends of the fragments are variously affected in accordance with the extent of the rarefying and productive processes which follow the injury; according as one or the other predominates the ends are diminished in size, sometimes to slender conical points or enlarged by the formation of irregular masses of bone on them.

"In a very few cases the rarefying process has gone so far that a large portion or even the whole of the shaft has gradually disappeared.

This tendency to excessive rarefication, when present is a serious obstacle to the success of the operation undertaken to secure union, and it has seemed to some writers to be increased by the presence of metallic sutures binding the fragments together."—*American Text-book of Surgery.*

The osteoclasts, excited into activity by the presence of any foreign body in bone, produce the osteoporosis, although in any case where the material and its site remains aseptic the osteoclasts are sure to be conquered finally, and the material become encysted by the action of the osteoblasts, the battle has delayed union to a greater or less extent, depending upon the relation of the amount of the foreign body to the size of the bone. I believe this rather theoretical assertion to be of real practical value, although I realize that many surgeons at the present time use telegraph wire to retain the fragments of a fractured ulna in apposition.

While the ability of bone to encyst aseptic foreign bodies has been proven by clinical and experimental demonstration, I believe that these foreign bodies retain a condition of osteoporosis at their site for a longer time than is compatible with early, prompt definitive union, and although this is probably never sufficient in itself to cause non-union, it is at least an indication to use as fine a wire as possible, and as small an amount of it as will meet the mechanical requirements.

"The use of metallic suture and similar devices to maintain the fragments in contact with each other is rarely desirable, since sufficient support can usually be given by the external apparatus; the presence of the foreign body appears somewhat to retard bony union."—*American Text-book of Surgery.*

Now, if by any method we can make a readily absorbable material serve the mechanical requirements in any of these cases, such a method should be adopted. Although among the cases requiring direct fixation, we may find at the present time but few in which the surgeon believes such temporary means will suffice, I predict that the number will constantly increase. In describing the repair of recent fractures, Green says: "The ends of the fragments are actively granulating at the end of three days; on the tenth day the periosteum has united and covers the spiral-shaped enlargement of the external callus." And while in ununited fractures the history of the case has already proven that there are factors present that have prevented this rapid and satisfactory callous formation, it is believed by the writer that these factors are local in practically every case,

and that if the operation is made thorough, as regards the resection of the bone ends, and the careful suturing of the periosteum, such a process as Green described will follow in the great majority of cases of ununited fracture.

In regard to the etiology of delayed union and ununited fractures, I will insert here the classification as found in the syllabus of Surgery by N. Senn, after the "American Text-Book of Surgery:"

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| Defective production of callus. | Suppuration.<br>Scanty covering of soft parts.<br>In joints.<br>Defective local and general nutrition.<br>Lateral displacements.<br>Longitudinal displacements. |
| General causes. | Rachitis.<br>Syphilis.<br>Pregnancy.<br>Lactation.<br>Marasmus.<br>Acute disease. |
| Delayed union and pseudarthrosis. | Displacements.<br>Interposition of soft parts or foreign body. |
| Local causes. | Defect in innervation.<br>Defective blood supply.<br>Inflammation of surface of limb.<br>Loss of substance. |
| Faulty treatment. | Application of cold.<br>Imperfect reduction.<br>Imperfect immobilization.<br>Circular compression.<br>Early passive motion.<br>Early use of limb. |

According to Lewis A. Stimson, "the causes of ununited fracture may be general or local. Among the former, are included general conditions and diseases which give rise to notable deterioration of the health, such as severe acute diseases, anemia, pregnancy and syphilis. Cases have been reported in which these affections have appeared to be the efficient causes, but they are so few that it must be admitted that the influence upon the healing of a fracture in general is very slight. Local causes are classified as follows: 1, unfavorable relations or conditions of the fractured part; 2, interposition of a foreign body; 3, defective innervation; 4, defective blood supply; 5, disease of the bone; 6, inflammation of the surface; 7, defective treatment."

Without commenting upon the causes of ununited fracture, I will make the assertion that the cases in which the essential factor is a constitutional one are very rare.

White and Wood report an interesting group of cases of ununited fractures in the *American Journal of the Medical Sciences* for January, 1893, and illustrate the use of an ingenious mechanical device for the direct temporary fixation of the bone ends, which should serve a most valuable purpose, especially in cases in which an open treatment of the wound was necessary on account of suppuration. They state that Hennequin, in a report of a series of unsuccessful cases of osteotomy and wiring for ununited fractures which he had published, attributed his failures to some constitutional condition interfering with repair. White and Wood state that Hennequin's report certainly illustrates the need of some more reliable and satisfactory method of fixation than the wire suture. This, they believe, will be found in the use of their apparatus.

I would say that in many cases absorbable material can not rationally take the place of unabsorbable and more decided mechanical fixation, and that the apparatus figured by White and Wood is ingenious and valuable from its mechanical virtues and the fact that it is of a temporary character, but I should attribute a certain number of Hennequin's failures, or any other series of failures, not to a constitutional factor interfering with repair, or to imperfect mechanical fixation of the bone ends, but to local conditions retarding or preventing union, conditions which he had not been able to overcome with even decided direct mechanical fixation, the use of which had perhaps led him to make use of insufficient external support. I believe that in selected cases the use of absorbable material for the direct fixation after a subperiosteal resection of the bone ends, with careful attention to the suturing of the periosteum, less reliance being placed upon decided means of direct fixation of the fragment, but extraordinary care in the external dressing, will be productive of better results.

Extension is out of the question when using absorbable material in a fracture of the femur, and in this case as the fracture was transverse, at the time of operation, and there was considerable loss of bone with very little inclination of the fragments to overlap there were no indications for its use. A plaster-of-paris cast was applied, encasing the entire limb, and the body to the armpits, and while hardening, the limb was abducted into a line with the upper fragment.

The catgut sutures in the bone would hold the bone ends in apposition until the cast hardened; they would be of effect until the periosteum and entire wound of the soft parts had united, and the drilling of the holes for the suture and the presence of the suture material itself would tend to excite a reparative process in the bone ends and would allow of such a process accomplishing early union of the fracture. The recovery in the case was uneventful. A fenestrum was made in the cast opposite the seat of fracture at the end of the third week, and the progress noted. There was not at any time much external callus. Rotation of the foot was communicated to the pelvis at the end of ten weeks. The cast was removed at the termination of eleven weeks, at which time there was very little external callus perceptible. Another cast was applied, and allowed to remain five weeks, at the end of which time passive motion was begun at the hip and knee joints.

The fact that absorbable material answered so perfectly in this case may suggest the possibilities of such material as a means of direct fixation of the bone ends in operations of recent and ununited fracture, and the writer believes that the near future will find catgut more frequently used for the direct fixation of fractured bone ends, while the use of unabsorbable material will be less frequently adopted.

As regards direct fixation in osteotomies, we can best introduce what we have to say by quoting from an article by Dr. Wilson which appeared in the *American Journal of the Medical Sciences* for March, 1893, on "Fixation After Excision of the Knee Joint:"

"There is abundant evidence to prove that in many cases, notably those in which there was tubercular osteitis, primary bony union is rarely obtained until after months or years have elapsed, and often when it has apparently been accomplished it yields, resulting in subsequent deformity.

"This would indicate that temporary methods of fixation are inadequate and tend to the abandonment of catgut, which can exert retaining force for a comparatively short time only.

"Steel nails are of doubtful efficiency, because of the short time in which they are employed. They are usually removed at or about the fourth week, *and are generally found to be loose, and therefore easily removed.* (Italics my own.)

"These facts show that they could not have exerted any force. The same statements would apply to screws, gimlets, drills, dowels, or other methods which are removed during the course of the first treatment.

"In four cases in which I have used steel nails four inches long, I have found that *there was absolutely no resistance to their easy removal, and that they were simply loosely imbedded principally in the cancellous matter.* (Italics my own.)

"In experiments on the cadaver, screws or dowels did not prevent motion, but upon lifting the leg by the thigh the weight of the leg produced great separation.

"Rotation of the leg broke loose the attempted fixation, and they appeared to be perfectly useless without efficient external support, and the employment of the latter appeared to be just as efficacious.

In the same cadaver, I employed stout wire at four points, through holes drilled in the compact tissue, and found that the objectionable movements were entirely absent although great force was exerted.

"If the wire suture is efficiently used, it would appear to be the method promising the best ultimate results, but its success depends upon its long-continued use.

"I can not agree with Treves, that primary union is apt to be hindered by the use of the metallic suture, and that their presence excites carious action.

"I have seen cases where the wire sutures were in two years after an incision, and Bryant says that he has not removed the wires in any case, unless trouble was caused by them and this rarely occurred.

"The accurate approximation of the tibia and femur, secured by metallic sutures, *naturally permits of less dependence being placed upon the external fixation apparatus*, but should not tend to its disuse." (Italics my own.)

I quote from Dr. Wilson's paper at some length because I take exceptions to his conclusions.

I *do* agree with Treves that the primary union is apt to be hindered by the use of metallic sutures.

I would never allow decided means of direct fixation of the fragments to take the place of decided external support, but always place my reliance on the nature of the external dressing, and make use of such means of direct fixation of the fractured ends as would be productive of the earliest possible bony union.

The only guarantee against later deformity is the absolute and perfect repair and complete ossification of the bone ends, which is accomplished best in the absence of foreign bodies, and if this is not accomplished, wire sutures will never prevent such deformity taking place.

Dr. Wilson reports in his paper a case of excision of the knee, in which he used internal fixation of chromicized catgut, and applied an efficient external dressing of plaster-of-paris including leg, thigh and pelvis, which was allowed to remain five weeks.

At this time, as apparently bony union had occurred, the patient was allowed to walk about, using a light posterior apparatus of plaster. Six months from the time of resection there was found a backward displacement of the tibia.

Dr. Wilson doubts the value of catgut as a means of internal fixation in these cases, and he suggests the use of wire sutures. I attribute the occurrence of post-operative deformity in the case he reports, to the fact that the apparent bony union present at the time the primary cast was removed was not yet complete. I must defend the manner in which this operation was performed, and attribute the latter deformity to some other cause than the use of catgut. I believe with Dr. Wilson that an important point in preventing such an occurrence is the prolonged use of an external support; but I do not believe as Dr. Wilson does, that wire sutures will prevent such late displacement taking place. I attribute the late deformities in these cases to the too early removal of substantial external support. In the case reported by Dr. Wilson, five weeks was too early a date to discontinue the plaster cast. Some of the late displacements take place as a result of an epiphyseolysis, or continuation of the osteoporosis from incomplete removal of the tubercular foci.

"The use of direct means of fixation of the resected ends in resection of the knee joint is being gradually abandoned. If the hip is well supported by a circular plaster-of-paris splint, or a posterior suspension splint, accurate apposition of the sawn surfaces and perfect immobilization of the limb are maintained almost to perfection, rendering the use of fixation nails or sutures unnecessary. The use of proper mechanical support should not be dispensed with until the resected ends have been united by an osseous callus, which will require, according to the age and general condition of the patient, from six weeks to three months.—*Senn's Tuberculosis of Bones and Joints.*

In arthrectomies and joint resections for tubercular affections in which Tilings' most valuable suggestions can be carried out, *e. g.*, temporary resections of those portions of the bone extremities to which important muscles and joint structures are attached; which can after the completion of the removal of the diseased tissue be replaced and fastened to the bone, catgut will serve a most excellent purpose. In the knee joints the patella is cut across transversely and later united with catgut sutures; at the elbow joint the olecranon is sawed with the insertion of the triceps and at the ankle joint temporary resection of the malleoli; at the hip joint the trochanter is temporarily resected and after the completion of the resection of the head of the femur the trochanter is united to the end of the bone, thus saving the attachment of important muscles, as well as securing a center of bone growth for the upper extremity of the femur; an important factor in the prevention of the shortening that follows removal of the epiphysis during the period of bone growth. In all these operations chromicized catgut will meet the fixation requirements.

## EPIDEMIC INFLUENZA; COMMONLY CALLED "THE GRIP."

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This disease has been commented upon by some of our ablest men, but it has not received the consideration it deserves, for it extends throughout the habitable world and has destroyed more lives than the cholera and yellow fever put together, attacking alike the centenarian and the child within its mother's womb.

Statistics show that railroad employes on freight trains are in more danger than men engaged in battle, yet there is much less dread of enlisting in the railroad service than the military. So also is there less dread of the grip than of cholera or yellow fever, for there are not so many lives lost at one time and in one place.

When the Colorado beetle, (the potato bug) first made its appearance among us it was thought that one year would end its ravages, but twenty years have now passed and still it is as great a pest as ever. At first the farmers undertook to pick the insects from the potato vines and burn them, but when they appeared year after year the task became Herculean and some other means had to be resorted to. Arsenite of copper is now employed so that the young beetles may feed on the plants and the poison at the same time.

After tormenting the human race for four years and four months, the grip is as prevalent as ever. As we can not destroy all the microbes that produce this disease, we must saturate the system with some germicide so that they may feed upon the human organism and the poison at the same time and die. Influenza is not only a disease *per se*, but it has entered into and complicated all the diseases and added to their fatality. When called to the bedside of a patient now I wonder at nothing I find present: Temperature ranging from 95 to 106.2 degrees F.: apoplexy in persons formerly supposed to be too young for it; intermittent pulse in those whose heart action was perfect the day before; inflammation of the mucous membranes everywhere, sometimes confined to that of the external ear accompanied by intense pain which is never relieved except after free suppuration. Sometimes it is confined to the membrane lining the air passages, the alimentary canal, the urinary organs or all of these together. Hemorrhages from any of these surfaces may occur at any time and do occur. An uncomplicated case of typhoid fever may be converted into a hemorrhagic case probably ending in death. A hearty meal or even a small amount of solid food may cause sufficient indigestion to produce heart failure or apoplexy, or both. Whole families of children have been swept off by tubercular consumption whose parents were perfectly healthy.

The phases that this disease assumes are too numerous to mention, and those advanced in life, rarely, if ever, thoroughly recover from it. Until last fall I had not lost a white typhoid patient for six years, when out of thirteen adults, six had profuse hemorrhage from the bowels, with four deaths; three directly from loss of blood. I have within the last two months had four such cases from the grip alone, three of which have recovered by the use of turpentine or blue mass and opium. The fourth is now in progress but is nearly cured after the use of salicylate of sodium, everything else having failed,—lead and opium, ergot, aromatic sulphuric acid and all. This patient had a hemorrhage four years ago and has been more or less demented ever since.

I am firmly convinced that the loss of blood in my typhoid cases was due to the grip and that, had their stomachs been in a condition to receive salicylate of sodium, they would still be alive, for all those to whom I could give it recovered.

Dec. 12, 1890, a young man was found wandering on one of our public roads. He did not know his own name or where he came from. I had him under observation only twenty-four hours before his friends took him away, and during that time was unable to find anything amiss with him. After his departure I discovered that he had passed only one ounce of urine mixed with mucus, showing inflammation of the bladder. Two weeks later when influenza became epidemic I would have had no difficulty in diagnosing this case but at the time was sorely puzzled. Three years ago I had under my care a gentleman between seventy and eighty years of age whose digestion was so much impaired by this disease that a mouthful of solid food would throw him into a high fever and would bring about such feeble heart action that I, three times, had to sit by his bedside for ten hours at a time in order to administer whisky and digitalis when needed. This state of affairs continued from the middle of May until the middle of October. One of the patient's legs was swollen and four degrees warmer than the other, as was also the leg of another patient affected with the same disease. As in typhoid fever, as much calomel should be used as can be employed without danger of salivation or undue purgation. In other words, where it is not contra-indicated calomel acts as a specific. Many authorities affirm that benzoate of soda is a specific in the disease under consideration, but I prefer the salicylate of sodium to any other drug where the stomach will bear it, for there is almost always more or less rheumatism or neuralgia present, calling for its employment. The fact is, that any preparation of soda is beneficial, the carbonate often being all that is required. Rochelle salts has acted better in some cases than anything else on account of its laxative properties, and probably also on account of the soda it contains.

I do not condemn the coal tar preparations altogether, as some do, for if not curative they mitigate the symptoms in this disease, and are perfectly safe in the treatment of the young and the aged too, if stimulants are at hand to counteract their depressing effects.

Nine-tenths of the sudden deaths that occur are due, I believe, directly or indirectly to indigestion, and the timely use of the carbonate or some other preparation of soda would avert most of them; and especially has this been the case since epidemic influenza first made its appearance among us. Hence the importance of confining our patients strictly to a liquid diet. Rest in bed should always be enjoined in the acute form of this disease, and often in the chronic form also, particularly if accompanied by hemorrhage.

Blank Applications for membership in the ASSOCIATION at the JOURNAL office.

## Report of the Committee on Medical Education Appointed by the Illinois State Medical Society.

*Presented at the meeting held at Decatur, Ill., May 15, 16, 17, 1894.*

It will be quite readily conceded by any one who examines into the subject that there is a conspicuous lack of uniformity in the quality of the medical diplomas of this country. That this lack of uniformity has been recognized by other countries is well known, and evidence of the fact is furnished when it is stated that no American degree entitles its possessor to legally practice his profession in the countries of Europe, while nearly all their degrees are recognized here, as entitling their holders to practice under the protection of the law.

It does not follow that the present very unsatisfactory and uncertain status of the American diploma implies either a want of ability, perception or honesty on the part of the American doctor; it came about naturally in the course of rapid national development, and indeed, in view of all the facts I think we should rather feel proud than apologetic of our medical schools. But many of the causes which in the past furnished sufficient excuse or perhaps created a necessity for the medical schools throughout the land to pursue the course and adopt the methods which they did pursue and adopt, no longer exist, and the time having arrived when national development has become so general, when there is no longer any frontier or back settlements, according to the former meaning of those terms, it is likewise time that the frontier and back settlement in medicine should disappear.

Though I am always in favor of a high grade of medical education, I wish to take this occasion to say that it is not my present purpose to in any way discuss the height of the standard of medical education. My sole purpose is to argue for uniformity, to place the American degree upon a firm foundation, so that wherever it is met with its value may be known. Manifestly this can only be accomplished by making it uniform. The problem, then, is to provide some practical means of securing uniformity. Probably there will be first uniform qualification in each State and finally a uniform national qualification.

It would doubtless prove profitable and interesting to investigate the methods long and satisfactorily in vogue in the various countries of the old world, but the conditions here are so very different from those which obtain there that it is hardly to be expected their methods could be transferred to our country. We should, however, always be willing to learn from our neighbors, and we happen in this instance to have a neighbor, the Province of Ontario, which has for the last twenty years had a plan in operation which has given great satisfaction and which I think we would, with certain necessary modifications do well to imitate.

Three cardinal principles form the basis of the proposed measure:

1. Each candidate must have submitted to him exactly the same set of questions.

2. The identity of the candidate must not be known to the examiner.

3. The examining body must be distinct from the teaching body.

The following is offered as a practical suggestion for the improvement of the existing state of affairs:

*An Act to establish a State College of Examiners in Medicine and Surgery for the State of Illinois, for the purpose of securing Uniformity in the Qualifications of Practitioners of Medicine and Surgery in the State of Illinois.*

SECTION 1.—A State College of Examiners in Medicine and Surgery for the State of Illinois is hereby established and may be known as, and called, "The Illinois College of Examiners in Medicine and Surgery of the State of Illinois." The membership of said College shall be made up as follows: The Governor of the State shall appoint seven members from each of the regularly established medical colleges of the State, and nine physicians who are not connected with any medical college in a teaching capacity, these latter to be known as members at large, as follows: Three members from each college and three of the members at large for a period of two years, the remainder for a period of four years. All subsequent appointments to fill vacancies caused by expiration of term of service shall be for a period of four years. Vacancies of unexpired terms made by death, resignation or other cause may be filled by appointment by the Governor.

The members appointed in the manner as above provided, may elect by ballot a number not to exceed fifty associate members, to hold office not to exceed four years, to assist in conducting the examinations or perform such other duties as the College of Examiners may assign to them. These associate members, however, shall not be entitled to vote at the meetings of the College of Examiners. No person shall be eligible for appointment as member, or to election as an associate member, who is not a regular graduate of medicine in good standing and a member of the Illinois State Medical Society.

SEC. 2.—The College may prepare and adopt by-laws for its government, elect its own officers, collect a fee of not to exceed $25 from each candidate for a license to practice, and a fee of not to exceed $10 each for preliminary or intermediate examinations. The College is hereby authorized to disburse all money received by it, and to make such contracts as are calculated to promote the interests of the organization.

The annual meeting shall be held on the day when, and at the place where, the annual meeting of the Illinois State Medical Society meets.

SEC. 3.—It shall be the duty of the College of Examiners to decide upon and fix the requirements of study and graduation, and to notify the faculties of the various medical colleges within the State definitely, in writing, of these requirements, at least six months prior to the commencement of the fall term succeeding the adoption of such requirements. To hold examinations, not less frequently than once a year at such times and places as it may fix upon, giving at least six months printed notice thereof to each of the medical colleges within the State, and cause a notice of such examinations to be published in the official journal of the Legislature not more than six weeks nor less than four weeks prior to the time said examinations are to be held.

To prepare and cause to be printed for the benefit of students, or prospective students of medicine, a definite statement regarding the course of study and requirements for graduation, together with such other information as might, in the opinion of the College of Examiners, prove helpful to said students.

To present such students as shall at said examinations display a satisfactory knowledge of the several subjects therein contained, a certificate duly signed and to the effect that said student has successfully passed such examination.

To issue a license to practice medicine and surgery in the State of Illinois to such students as pass the final examination, furnish satisfactory evidence of good moral character, and fulfil all other requirements in conformity with the law.

To provide means in conducting the examinations for concealing the identity of students by examiners, and otherwise securing a uniform, fair and impartial examination.

SEC. 4.—All examinations shall be written, each student having presented to him the same printed questions at the same time, excepting that the College may in addition, when it deems proper, call upon any or all students to submit to an oral or practical examination, or both, after the written examination shall have been completed.

No candidate shall put his name, initials or any mark or marks of identification upon his papers of written answers except the number or character assigned to him after he has seated himself for the purpose of writing.

SEC. 5.—Graduates of medical colleges outside of the State of Illinois, and all other persons excepting such as are here-

inbefore provided for, desiring to practice medicine and surgery within the State of Illinois, shall notify the Secretary of the College in writing of such desire, and submit a certificate of their qualifications if they have such certificate, whereupon the College may take such measures as it deems expedient to determine the fitness of such persons to practice medicine and surgery, and grant or withhold a license in accordance with its findings.

SEC. 6.—All other laws regarding the licensing of persons to practice medicine and surgery in the State of Illinois are hereby repealed.

SEC. 7.—The license to practice medicine and surgery granted by the College of Examiners in Medicine and Surgery for the State of Illinois, as hereinbefore provided, shall be the only legal authority to practice medicine and surgery in the State of Illinois.

SEC. 8.—Students of medicine who were registered at a medical college within the State of Illinois prior to the enactment of this law shall be exempt from its provisions.

SEC. 9.—This Act shall only apply to the profession of regular medicine.

NOTE.—The writer is personally in favor of having a joint board providing for homeopaths and eclectics, but for the sake of clearness omitted to provide for it in the above suggestion.

SANGER BROWN, M.D., Chairman.

# SOCIETY PROCEEDINGS.

## The Medical Society of the State of Tennessee.

*Held at Memphis, Tenn., April 10 and 11, 1894.*

(*Concluded from page 708*).

SECOND DAY—MORNING SESSION.

DR. B. B. CATES, Knoxville, read an article on

SOME EXPERIMENTS UPON THE PRIMÆ VIÆ, WITH REPORT OF A NEW METHOD OF ENTERORRHAPHY; ITS TECHNIQUE AND RESULTS.

For the purpose of familiarizing myself with the technique of intestinal surgery, and of testing the efficacy of hydrogen gas in locating perforations of the primæ viæ, I instituted some observations upon animals. As far as the technique is concerned, these operations were done with strict antiseptic treatment of the wounds, instruments, sponges, utensils, hands of operator and assistants, but there was no preparation regarding the condition of the animal before or after the operation. Nevertheless, after the abdomen was entered I was very careful to prevent any extravasation into the abdominal cavity, by drawing only that portion of the primæ viæ intended for operation into the external wound, and packing bichlorid gauze around the gut at the margin of the wound. I then displaced the fecal matter from the field of operation by pressing on either side of the gut with my fingers, and tying elastic ligatures around the gut above and below the point of incision in the bowel. These ligatures prevented fecal regurgitation contaminating the wound and embarrassing the operation. No attention was paid to the toilet after closing the external wound, the animal being allowed to run about and eat what it wished. These experiments, eighteen in number, lead me to the following conclusions:

1. Perforations occurring at the site of operation when making invagination, are more liable to be near the mesenteric attachment.

2. Nothnagle's test corroborated three times.

3. When using hydrogen gas in locating perforation and obstruction in primæ viæ, we should be sure there is no occlusion in the rectum, as ordinary feces, etc.

4. In excision of the cecum, when ligatures are applied to the mesentery to stop hemorrhage, there is liability of including the arterial supply of the bowel not in the area of the cut-off gut.

5. That it is not absolutely necessary to apply a ligature to the mesenteric arteries in the cut-off gut, simple compression with hemostatic forceps and carrying the mesentery from its attachment to the cut-off gut being sufficient.

6. In making lateral anastomosis, or end-to-end union of bowel wall, a slight scarification of the serosæ, would, as first pointed out by Davis, of Birmingham, hasten the adhesion and consequent healing of the coapted parts. This may be ignored where the adherent surfaces are backed up by sutures.

7. Where the coapted parts are re-inforced by sutures such as catgut, it serves as a framework for the plastic exudate which is quickly thrown out, thereby shutting off any avenue for the intestinal secretions to escape into the abdominal cavity.

8. Whatever sutures are applied to serosæ, they will be covered with plastic exudate within twelve to forty-eight hours.

9. Buttons offer many advantages as sutures over plates in making approximation of bowels by later anastomosis: 1, time, which is such an important factor in these operations, is greatly reduced: 2, they do not slip about and thus annoy and vex the surgeon; 3, the approximate surfaces can be increased or reduced at the surgeon's will; 4, they act as splints to the bowel and bring the coapted parts into closer union, and the ectropium is easily controlled. Lastly, the button, when it frees itself by pressure atrophy will, on account of its small size, easily pass through the ilio-cecal fissure.

10. Wherever the fistulous communication between the bowel is over an inch in length, a button should be inserted every three-fourths of an inch to prevent ectropium, and bring the bowel into closer union.

11. Lateral anastomosis as a surgical procedure offers better ulterior results in restoring the fecal circulation than end-to-end union of bowels. In the former method, when the opening is not long enough, it is not followed up by so great traumatic stenosis as in end-to-end union.

12. In making this anastomosis, my button is superior to plates, and therefore I offer it to the surgeons of America, (in lieu of plates), into whose hands its future usefulness as a surgical process is resigned.

13. Whatever procedure is adopted, it is safer to back up or enhance the circumference of the fistulous communication in coapted bowels with sutures of fine aseptic silk, which will encapsulate itself, or catgut, which will be ultimately absorbed, the Dupuytren or the Dieffenbach suture being the quickest and easiest applied.

The button used in my experiments consists of a male and a female portion. The female portion of the button is made of brass, though for obvious reasons aluminum or silver would be better, and has a base seven-sixteenths of an inch in diameter, with a small cylinder projecting from it about three-sixteenths of an inch long, hollow from end to end, and with a slit on either side of the cylinder reaching nearly to the base. The male portion of the button, which is solid, consists of a base five-sixteenths of an inch in diameter and a neck one-fourth of an inch long. This fits into and may penetrate beyond the base of the female button. To make the buttons easier of introduction, the female is accompanied by a sharp point about an inch long, which has a neck guarded by a shoulder, and this neck fits into the apex of the cylinder of the female button. The male button is also accompanied by a sharp point, a cap, an inch long, hollow at its base. This fits over the neck of the male button. The technique of the operation, when using the button, is the same as when using the plates until after the incision is made into the intestine, when an assistant arms the female portion with the steel point, which you quickly thrust through the entire thickness of the bowel wall from within outward, commencing on the lower side of the fissure. Then fitting the sharp spike or cap over the male button, it is passed through a corresponding point in the opposite cut edge of the bowel, from within outward. The male is then fitted in the female button and pushed home from within the lumen of the bowel. In like manner the angles of the fissure are approximated, leaving the upper sides of the opening to be closed last. Here the surgeon, after inserting the buttons, is to grasp the base of the male and female buttons separately with tissue forceps, and after inverting the cut edges of the wounds with buttons *in situ*, so as bring the serosæ *vis-a-vis*, he engages the male button in the female and pushes it home from without through the bowel wall.

(This button is smaller than the Murphy button).

DR. J. I. MINOR, Memphis, presented the subject

THE EAR AS A FACTOR IN CAUSING CEREBRAL DISTURBANCES IN INTESTINAL AND OTHER DISORDERS OF INFANCY.

These cases usually first come under the observation of the general practitioner, and he ought to be able to recognize them. Inflammation of the middle ear is the most common cause of these disturbances, when they are due to ear trouble, and for its positive detection only a mirror and ear spectrum is necessary, with an ability to see the drum of the ear. This will be found red and injected when inflamed. The treatment is simple, medicinal applications usually sufficing, ex-

cept in a few cases where pus is present, where paracentesis may be necessary.

DISCUSSION.

DR. SAVAGE.—Attention is often directed to the ear by spasmodic nursing. Excluding nasal obstruction and capillary bronchitis, the only cause for spasmodic nursing is an inflammation of the middle ear. The child will not hold its head still. Besides, there is a pecular outcrying that is readily recognized after having been once heard. He had obtained excellent results with chloroform in olive oil. This ought never to be warmed, as heat drives off the chloroform.

DR. SMITH mentioned the fact that the general practitioner must not neglect the ear.

DR. GRADDY.—Olive oil alone will accomplish as much as the chloroform and olive oil, and warm goose grease or lard will do the same thing. The action is purely mechanical. When applied locally, chloroform is not an anesthetic.

DR. NEAL thought chloroform valuable.

DR. HERRON had used morphia, atropia, olive oil, glycerin, and chloroform, and considered them all valuable. He had never performed paracentesis.

THE PRESIDENT had heard from a non-professional source, that "'possum grease and onion juice" is excellent.

DR. CAIN.—Goose grease is excellent, and warm water is good, as are also hot applications. Dr. Savage failed to mention acute stomatitis as a cause of spasmodic nursing. This is much more frequent than disease of the middle ear.

DR. THOMAS W. GALLION formerly used olive oil and tincture of opium, but now prefers glycerin and tincture of opium, which acts admirably. After congestion of the drum membrane is relieved, he employs warm water douches.

DR. SAVAGE stated that chloroform has other virtues than those of an anesthetic, and is excellent to keep things sweet. For instance, it will preserve urine almost indefinitely.

DR. MINOR, in closing, said olive oil was excellent. When combined with chloroform, the latter seems to act as a counter-irritant and draws the soreness out.

DR. T. J. CROFFORD, of Memphis, gave a

REPORT OF CASES.

This was a report of an operation for epilepsy. The reasons given for the operation were as follows:

1. The epilepsy began with, or soon after, and was always associated with menstruation fer the first four or five years.

2. The attacks were increased by pregnancy and parturition.

3. There was a uterine flow at the time of the attack. Even in the interval between the menstrual periods, four or five years after the inception of the epilepsy, she would invariably have a slight show.

4. Sexual intercourse invariably produced it within twenty-four hours.

5. Examination proved there was a disease in the pelvis.

6. Neither she nor her husband desired a progeny, because statistics show that epilepsy is likely to be transmitted.

7. She claimed a right to be rid of it, a right to enjoy life, and a right to make her life as useful as possible. Both ovaries and tubes were removed to stop menstruation, and she is now much improved.

DISCUSSION.

DR. DOUGLAS.—It is not a determined fact that the ovaries have anything to do with menstruation, although he (Dr. Douglas) thought it influenced more or less by ovulation. In reference to the sixth reason; if the husband did not desire a progeny why should not *he* have submitted to an operation? When there is nervous disease and local pelvic disease, demonstrating the presence of disease in the ovaries, we should always operate, and epilepsy is no contra-indication. The results show an operation was required.

DR. GILLESPIE thought the operation justified, and spoke of a similar case cured by removal of the clitoris.

DR. HAPPEL did not think the last two reasons would justify an operation. He agreed with Dr. Douglas in referenee to the sixth reason.

DR. SAVAGE referred to the condition being a reflex trouble. If a center in the brain is continuously irritated it will undergo molecular change and the trouble will then continue after the cause is removed. If the general practitioner does not understand the case, he should call a specialist, for thess cases can be absolutely cured if the cause is removed early.

DR. CROFFORD, in closing, said the trouble is primarily of peripheral origin, and the central nervous system becomes secondarily involved. Although the moral reasons alone would not have justified an operation, I doubt if I should have operated without them.

DR. GEO. H. PRICE, Nashville, presented a paper on

CAUSES OF EYE-STRAIN.

Beginning with the least and ascending in the scale, according to the gravity of the symptoms which they as a rule present, the causes we would consider factors of eye-strain are as follows:

1. Myopia, uncomplicated.
2. Myopic astigmatism, with the rule.
3. Myopic astigmatism, against the rule.
4. Hypermetropia, uncomplicated.
5. Hypermetropic astigmatism, with the rule.
6. Hypermetropic astigmatism, against the rule.
7. Myopic astigmatism, oblique.
8. Hypermetropic astigmatism, oblique.
9. Myopia, any form combined with esophoria.
10. Hypermetropia, any form combined with exphoria.
11. Myopia, with esophoria and hyperphoria.
12. Hypermetropia, with exophoria and hyperphoria.
13. Myohia, esophoria, hyperphoria and cyclophoria.
14. Myopia combined with insufficiency of interni and externi, insufficiency of externi predominating.
15. Hypermetropia combined with same conditions, insufficiency of interni predominating.
16. Mixed astigmatism, with muscular complications.
17. Muscular conditions alone.

Defective focus is in many cases the least important condition demanding our attention, but at the same time I am not to be understood as disposed to place these entirely in the background, for in some instances they are the only cause of complaint.

A patient comes to you complaining of being annoyed by a sensation of something in the eyes, a gritty feeling, which soon causes the eyes to water and burn when any near work is attempted. If they discontinue the near work, the symptoms subside, to return again when they resume the work. If the work is compulsory, they soon show some conjunctival irritation with hypersecretion of tears and some mucus, which causes a blurring of vision. Later they complain of a tired feeling about the eyes, a running of the letters together, a constricted condition of the brow or head, a pain localized anywhere from the temple to the back of the head, sometimes extending down the back of the neck and about the shoulders, an inability to keep the eyes open or to read for any length of time without growing drowsy, photophobia, a twitching about the lids, later a blepharospasm, choreic condition of muscles of face and extending beyond, or most violent attacks of pain ordinarily called neuralgia, to say nothing of even graver disorders, such as epileptic seizures.

After reporting several cases as examples, the essayist presented a set of prisms he had recently devised, which consists of two prisms in each cell of the frame, resembling in construction the Franklin bifocal lenses, but quite different in their action. The bases of the prisms in each cell of the frame are placed in opposite directions. Their use exercises both the externi and interni. In closing the paper he presented the following statistics, compiled from five hundred cases refracted from March 1890 to March 23, 1891:

Myopia, five cases or 1 per cent.
Myopic astigmatism, sixty-six cases, or 13 1-5 per cent.
Mixed astigmatism, nineteen cases, or 3 4-5 per cent.
Hypermetropia, seventy-one cases, or 14 1-5 per cent.
Hypermetropic astigmatism, 339 cases, or 67 4-5 per cent.
500 cases, or 100 per cent.
(Discussed with Dr. Graddy's paper).

SECOND DAY—AFTERNOON SESSION.

DR. L. B. GRADDY, of Nashville, gave a paper on the subject of

THE MECHANISM AND THE PRESENT STATUS OF THE TREATMENT OF ASTHENOPIA.

The paper was an explanation of the mechanism of astigmatism. The essayist claimed that through innervation of the ciliary muscle the other muscles become tonically contracted and exhausted.

DISCUSSION.

DR. F. G. SMITH, Chattanooga.—In young persons with hypermetropia, where there is a good supply of energy and the eyes are strong, glasses may not be indicated, but usually they are indicated. The principle is that a greater or less amount of hypermetropia will be corrected by the glasses. In myopia the indication is for a dim distant vision. The majority of patients may be advised that they need not employ glasses.

DR. GRADDY was impressed with Dr. Price's paper, in that it dealt with very small degrees of hypermetropia.

DR. SAVAGE.—Since the ciliary muscle can influence only the internal and external recti muscles, he could not agree with the author of the paper that that muscle is a veritable Pandora's box, out of which escape all the ills that come to human flesh as a result of eye-strain. There is an intrinsic muscle error and there is a pseudo muscle error, the one very different from the other in nature; and the treatment of the one must be different also from the other. The intrinsic muscle error may depend on the size of the muscle, on its attachment to the globe, and possibly on the fact that it may be too abundantly supplied with nerve fibers. The intrinsic error may affect any one of the six muscles concerned in the movements of the eyeball. The pseudo muscle error is dependent on the now well-known relationship between the centers of accommodation and the centers controlling the internal recti muscles. The intrinsic or inherent muscle errors must be treated by means of operations or by exercise; and it is an easy matter to determine whether the one is to be resorted to or the other. Sometimes it is necessary to resort to both operations and exercise before a case of this kind is cured. The cure of the pseudo muscle errors must be effected either by the correction of focal error or by exercise of either the internal or external recti. Sometimes these cures must be effected by a combination of these two means.

DR. PRICE.—In some cases the amount of myopia, hypermetropia, or any combination of myopic astigmatism, or mixed condition, is to be totally disregarded. The most important cases are those in which there is no indication for muscular correction.

DR. GRADDY.—If we simply apply tests for exophoria and esophoria, and depend on them, we may say all cases are due to that. When the muscle has lost capacity for strength, the only thing is to operate. Weak prisms, while they do innervate the muscles, may not unjustly be compared with the principles of homeopathy: The little doses may cure; the big doses are certain to cure.

The election of officers followed.

On motion it was voted to pay the expenses of the Treasurer to and from the Society, and to increase the salary of the Secretary $50.

DR. F. L. SIM, Memphis, read

ASEXUALIZATION FOR THE PREVENTION OF CRIME AND THE CURTAILMENT OF THE PROPAGATION OF CRIMINALS.

Capital punishment is a curse to our nation, as it has been to every government on earth that has practiced it. Judicial homicide or legalized murder, are names that place the hanging of criminals in line of proper nomenclature. Even the *methods* of execution are now becoming repugnant to the people, and it is sought to glide the criminal, on "flowery beds of ease" over the Jordan, with the aid of electricity or anesthesia.

The desideratum of the hour is a substitute for capital punishment, now almost a farce with the American people, that will give the greatest protection to the community and avert the degrading horrors of the retreating custom. Tennessee makes rape punishable with death, but this is too good for such a class of men, and the tortures of former times too demoralizing upon the community for their rehabilitation. Castration and the penitentiary are their just dues. Sterilize criminals, confine them in the penitentiary for a term of years, and no ill effects from a moral point of view will follow, while it fully protects from further crime originating in sexual disease, and shields society from their like forever. When the question of insanity is urged in justification of crime, and such mental condition is due to sexual excess, sexual sterilization, whether the criminal be male or female, should undoubtedly be a part of the remedial agency punishment prescribed. Would castration be a grave punishment to man? This question opens a wide field for thought. Castration among the moral, for disease, is grave enough, but with him who devotes his entire thought to sexual gratification, death is secondary to sterility.

In the scientific handling of all criminals, whose crimes are associated with or dependent on sexual depravity, such persons would keenly feel the awful justice of the remedial agency, and would appreciate a life of rectitude, should they regain their freedom. The history of the eunuch of former times shows that he not only lost his licentiousness, but all feeling of manhood and equality as well, and grew fat from an easy conscience and a tranquil nervous system. Sexual sterilization undoubtedly robs the subject of all hope in this world, but it leaves intact his prospects for a life of virtue and happiness in the great beyond. It is to the prevention of such crimes that we must bend our energies if we would save the community.

One has only to look over the current literature of the day, North and South, for assurance that the black people are rapidly coming to the front as criminals. The frequency of the crime of rape perpetrated upon the white female is becoming paralyzing to the country, and yet provisions of our law, making such attacks felony punishable with death, coupled with the terrors of the mob, have not only failed to check but have actually permitted an increase of the crime. A prominent attorney of the law recently informed the writer that certainly not more than one-fifth of the rapes committed by negroes with their own color ever come to light. A free dispensary physician states that application for remedial agents to relieve the suffering following rape or attempt thereat are by no means uncommon.

If the law provided sterilization for all such rascals, the colored man would soon know that rape is a crime of no small magnitude, even with his own color. Then, too, it would place an object lesson, a prideless and demure eunuch, within every negro community in the Southern States.

In former times, in Oriental countries, it was no uncommon habit to castrate males for the purpose of making suitable domestics. Many of them, however, subsequently gained high and honorable rank among the citizens.

In the opinion of the writer, the method of scientific inquiry into the causes leading on to the committal of crime, and the adaptation of remedial agents that render such causes subsequently inoperative, either with or without additional punishment, is the proper method for the immediate and permanent protection of society, the punishment of criminals and the arrest of their propagation.

DISCUSSION.

DR. J. B. LINDSLEY, Nashville.—As to capital punishment one-tenth of the little code, constituting that wonderful system of law published by the great law-giver, Moses, said: "Thou shalt not kill;" to this day there has not been any revocation of that code, and you can not find the authority in any government to commit murder under any name whatever, whether in war or peace. Of course it follows that we must have some other mode of punishing criminals. We want to save society from all criminals, and hence the idea of asexualization has been propagated throughout the country. This will eventually be practiced for the prevention of propagation of not only criminals, but of idiots and all people we do not want to live. Questions such as these depend more on medical men than on any other persons.

DR. RODGERS reported two cases of asexualization of the male. In the first, appetite was diminished directly, though the sexual act could be performed. In this case there may have been some of the secretory part of the testicle left. In the second case, performed about five years ago, there was none left. Several months after the operation this patient claimed there was no particular change, but the appetite has since diminished.

DR. NEIL regarded the subject as not in the province of medicine, thinking it a legal and legislative question.

COL. HOLT, of the Memphis bar.—This is a living and real question, and one which must be solved by the medical profession rather than the legal profession. The actions of the human mind are as regular in their operations as any of the laws of nature. Scientific men are beginning to consider crime due to a mental aberration or to an abnormal mind. The legal profession can never handle a question of that sort. We regard capital punishment a fallacy. It certainly has not succeeded heretofore; what it may do in the future we do not know.

DR. HAPPEL has been an advocate of the whipping post. If you apply the lash freely, the little crimes and petty offences will not be committed. Under the present form of punishment, the same criminals are brought back to jail, year after year. The prison punishment is a fallacy. There is an old principle that like begets like. There are exceptions to all rules, but as a rule a criminal will beget a criminal.

DR. SIM, in closing the discussion, referred to excessive indulgence as a great factor of producing diseases, which are handed down as such. A man suffering the pathological change of chronic alcoholism or excessive indulgence in venery, will hand down his disease in the form of epilepsy, chorea, catalepsy, excessive nervous debility, etc.

DR. C. R. ATCHISON, Nashville, presented the

LOCAL TREATMENT OF CUTANEOUS MALIGNANT EPITHELIOMATA.

No matter what the cause of cancer may be, the offending

agent is merely a morbid epithelium, and anything which will remove or destroy this epithelium will cure the disease. A cancer enlarges by peripheral extension, not by centric, the surrounding tissues are infiltrated, though perhaps only to the extent that they can not be recognized by touch or unaided sight. Indeed, these diseased cells are sometimes so slow and insinuating in their growth that they can not be found even with the microscope, yet they prove their presence by a so-called recurrence after operation. These epithelia traverse the lymph channels and pursue their only way in no regular order. It can easily be seen how difficult it is to decide with any certainty how far from the lesion the incision should be made, especially about exposed surfaces where minimum disfiguration is of importance. The way to remove a cancer is to remove the epithelial cells to which it is tributable, and the method of removing them should be employed that is most likely to remove *all* the offending epithelia, even if the operation be followed by more pain and deformity. Other things being equal, we should select that method which gives the least deformity.

Among other means of treating cancer should be mentioned electricity. Though temporary improvement seems to have resulted from the use of the current, no permanent improvement has occurred. As a caustic it is as efficient as other caustics, the disadvantage being that it attacks sound tissue as well as that which is diseased. It is advantageous in some localities where the use of strong caustics is impracticable, as upon the roof of the mouth.

Where there are flat surfaces or where there is a good deal of loose tissue which can be removed without much deformity, the knife had perhaps best be used. Early cancer of the mammary glands is to be removed by this method. No other method can accomplish as good results with as much certainty. Old and advanced cancers upon the extremities are often best relieved by amputation.

In selecting the caustic to be used, it is a *sine qua non* that only those should be chosen that can destroy the epitheliomatous tissue rapidly and effectively; nitric, sulphuric, carbolic and arsenious acids, caustic potash and chlorid of zinc. The use of caustics which are not strong enough to destroy sufficient area immediately, really does more harm than good. The strong mineral acids are sometimes useful, especially when the cancer is small and superficial; but when large and deep seated we had best rely upon the celebrated trio, with which all physicians are familiar, viz.: Caustic potash, chlorid of zinc, and arsenious acid.

Pyoktannin, fuchsin, pyrogallic acid, resorcin and salicin have all been used, but they are slower in action and not so sure as the trio just mentioned, which will do all the others will and do it quicker and better. Cancer, so often pronounced incurable, will become less dangerous when we come to realize the absolute necessity of promptness and the value of caustics.

DISCUSSION.

Dr. Cain mentioned the lymph channels as a method of extension, and for this reason did not indorse the treatment recommended by the essayist; caustics and escharotics. In some cases these are to be used, but usually the knife is the ideal treatment. The remedies mentioned, and all cauteries except actual cautery, would stimulate the spread of the disease through the lymph channels and drive it farther through the tissues. This the knife does not do.

Dr. Louise Druillard reported a case of a child, probably 6 years old, living in a small town in Texas, who had cancer under the ear. It was subjected to operation twice unsuccessfully, and was finally cured permanently upon the application of a paste by a traveling "doctor."

Dr. Crockett reported a case of epithelioma of the cheek, in a patient with heart disease, which was treated like the case reported by Dr. Druillard, and the patient died of heart disease about ten years afterward.

Dr. Jones reported a case of epithelioma within half an inch of the eye, and the same distance from the nose, the growth being the size of a nickel, in which a previous operation with the knife was unsuccessful, and asked if the use of caustics would produce a scar which would be more likely to evert the lid than the use of the knife.

Dr. Hillsman replied that in a case under his observation the lid was everted after the application of a paste by a quack doctor. A great many people will not permit the use of the knife at all, and consequently they fall into the hands of charlatans. We discard this method of treatment too much. There is a tendency of the remedies mentioned to destroy the diseased tissue.

Dr. Happel reported a case operated upon with the knife last June, after caustics had failed. The eyeball, lid and all the tissues from the principal portion of the eye were removed, and so far it has proved a success.

Dr. Douglas.—One reason why the general profession has discarded the various pastes is just because the charlatans have taken them up, and no doubt there is some good in them, but in carcinoma of the breast and uterus, the knife is the only thorough method.

Dr. Cain thought the magical cures, seemingly, were usually not cases of cancer, and if epithelioma is cured at all it is very rare. Dr. Waterfield's case could not have been a case of malignant disease. The diagnosis can only be made with the microscope. In Dr. Jones' case he thought the knife should be used and a plastic operation made to fill up the space. He had known such cases to heal after a plastic operation, but they are very likely to return.

Dr. Atchison, in closing, said the results of the caustics will extend as far as the surgeon would go with his knife, and even farther. We may say there are three circles: The first indicates where the caustic is applied; the second, where the cells had infiltrated; and the third, healthy tissue. Under ordinary circumstances the incision would never be made as far as the second ring, and the cells remaining will then cause another outbreak.

Upon report of the Judicial Council, the following members were dropped from the membership of the Society: Dr. E. E. Jones, Nashville; Dr. B. P. Keys, of Chattanooga; and Dr. E. E. Kerr, Chattanooga.

Under the title, "The Treatment of Inebriates," Dr. Heber Jones, of Memphis, presented a resolution to be offered at the next meeting of the State Legislature, providing for the admission of alcoholic patients to the pay wards of the public institutions. The following resolution was passed:

*Resolved*, That it is the sense of this Society that the medical profession in this State should unite in an effort to lessen as far as possible the evil effects of intemperance.

*Resolved*, That in the opinion of this Society this cause can be materially advanced by suitable legislation to this end. It is our belief that many otherwise hopeless inebriates may be permanently cured, if the physician is enabled to exercise proper control over them. We think this can best be secured in our public asylums. We therefore desire to ask the Tennessee Society to use every effort to secure at the next session of the Legislature the enactment of a law permitting any citizen of the State to enter any of our asylums for the treatment of confirmed inebriety. Provided, however, that this shall apply only to the pay department of these institutions.

On motion by Dr. Crockett, a committee was appointed to place the matter before the next session of the Legislature.

Adjourned until the second Tuesday in April, 1895, to meet in Nashville.

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**The Journal on Top.**—Instead of there being an unanimous desire among the profession to do everything in its power to make the Journal of the American Medical Association the leading periodical of its kind in this country, and, if here, in the whole world, there seems to be a desire on the part of some to annoy, hamper and criticise with a view of lessening its growth and power. We are pleased with a recent editorial note under the head of "Captious Critics," in which the editor says in plain language to his adversaries, "mind your own business." The Journal never won a more complete victory than it has recently. A few weeks ago it published an article on "The Abortion of Typhoid Fever." The author of the article claimed he could abort all cases of typhoid fever, and gave a number of cases to illustrate his statement. But he did not give any reference to his methods of treatment, neither did he intimate in any way what that treatment was. This gave another large journal the opportunity to express itself in most forcible terms. The editor says the author of the paper "refuses to divulge his remedy, and it is surprising that any respectable medical journal should give publicity to his claims." But the laugh comes in just here, when the subscribers to each of these journals received their number of the Journal of the American Medical Association which contained the second article, giving the author's treatment in full, nearly a week before the editorial of the second journal arrived. In other words, before the criticism had reached the subscribers, the cause of the criticism had been removed, and the Journal came out on top, as usual. The moral of this little tale is, it is best to look before you leap.—From the May number of *Food*.

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All members of the Association should send their Annual Dues to the Treasurer, RICHARD J. DUNGLISON, M.D., Lock Box 1274, Philadelphia, Pa.

SATURDAY, MAY 19, 1894.

## PERMANGANATE OF POTASSIUM AS AN ANTIDOTE TO MORPHIN.

The recent advocacy of permanganate of potassium as an antidote to morphin, in cases of poisoning, recalls the treatment of snake bite and other similar applications of this therapeutic agent, and invites to the study of the chemic and physiologic considerations upon which its employment is based.

About 1885 CONDY introduced permanganate of potassium into medical practice as an agent having special power in infectious conditions. He presented it in the form of a solution, which also contained aluminum sulphate, the latter being added to increase the oxidizing effect of the permanganic acid. He asserted that he had found by experiment, that in this form and combination all the available oxygen of the permanganic acid is utilized, whereas only about 60 per cent. of this amount is obtained when the simple alkalin permanganate is used, as in the ordinary solution, which is generally called CONDY'S Fluid, and which was officinal in the "United States Pharmacopœia," edition of 1870.

It has been demonstrated by clinical observation as well as laboratory experiment, that permanganate of potassium is antidotal to infectious disease, because it is destructive to the lower forms of life. It is especially applicable where it can be brought directly in contact with the microörganisms, as in diphtheria, gonorrhea, local infective processes, suppurating wounds, etc. By its great oxidizing powers, it is able to destroy the infectious quality of septic matter, and in virtue of this it is a true disinfectant. The chief objection to its use is that in strong solutions it is caustic; even weak solutions if too freely used, excite irritation and, occasionally, inflammation of the skin and mucous membranes. Thus, in treating diseases of the middle ear, solutions stronger than 1 grain to the ounce should not be used; for the nose and mouth 3 to 5 grain solutions may be employed; and for applications to the skin ordinarily, it is not advisable to order solutions much stronger than this. From 15 grains to a drachm to the pint of warm water, is the ordinary limit for the treatment of foul ulcers, bromidrosis, etc. Twenty-four grains to the ounce is considered a saturated solution, but this is only exceptionally used, applied locally to counteract infection. That the permanganate of potassium is a germicide has been fully established by the experiments of STERNBERG. As an antiseptic, it has the great advantage over corrosive sublimate of being comparatively non-toxic and of being a prompt deodorizer.

To DR. S. WEIR MITCHELL is due the credit of suggesting the use of permanganate of potassium in snake bite, in which it has proved to be a valuable resource. In order to obtain the antidotal action, the solution is to be injected as quickly as possible after the accident, directly into the punctures made by the fangs of the snake and also in the immediate neighborhood, so as to secure the contact of the remedy with the yet unabsorbed poison. This treatment was indorsed by LACERDA, and many instances of its successful application have been reported. To cite a single communication out of many, we may refer to the paper[1] of DR. A. W. BARBER, of Cheyenne, based upon the successful treatment of nine cases of rattlesnake poisoning by means of permanganate of potassium. The method he employed is the following: A 15 per cent. solution is kneaded into free incisions made to the bottom of the wounds; it is also injected hypodermically in the vicinity, and the dressings wet with the same solution applied. Alcohol and carbonate of ammonium are also given in amounts regulated by the state of the pulse; laxatives, diuretics and diaphoretics are subsequently utilized in eliminating the poison. An important point in DR. BARBER'S method is the intermitting application of the tourniquet, by means of which only a little of the poison is permitted to enter the circulation at a time. Here the permanganate is used locally as a chemic antidote and the well-established physiologic antidotes, alcohol and ammonia, are relied upon to overcome the poison as it gradually enters the circulation, in what might be termed broken doses.

The oxidizing effect of this agent has also been utilized in the condition of phosphorus poisoning. Last year, BOKAI recommended the internal administration of a solution of one-third of 1 per cent. strength, where phosphorus in substance had been taken into the stomach. It acts by coming in contact with the poison in the stomach and converting it into ortho-phosphoric acid, which is harmless. Here again it acts only upon the excess of poison remaining in the stomach, and does not follow the toxic agent into

[1] Therapeutic Gazette for January, 1892.

the circulation. Indeed, the statement of RINGER that "the permanganate itself can not pass into the blood undecomposed," is in full harmony with the teaching of other authorities. Moreover, on account of its attraction for organic matter, the permanganate is decomposed in the stomach in a very few minutes after being swallowed.

We now come to the most recent application of permanganate of potassium, as an antidote in the treatment of morphin poisoning. Its claims rest upon the experiments and clinical trials of DR. WM. MOOR, published in the *Medical Record* of February 17 of this year. According to this observer, morphin is rapidly oxidized by the permanganate, even in the presence of peptones and albumen. By clinical experiment it was ascertained that if comparatively large doses, of from 3 to 5 grains of sulphate of morphin, are quickly followed by a solution of permanganate of potassium, no narcotic influence will result. In other words, the permanganate, by oxidizing the morphin prevents the toxic effects from being manifested. As the result of several trials, which corroborated his first experience, DR. MOOR pronounces the permanganate of potassium a reliable antidote for morphin, if given immediately after the poison has been swallowed. He gives from 10 to 15 grains, dissolved in half a pint of water, repeated at intervals of thirty minutes. It may be assumed as proven, then, that in a case of morphin poisoning the permanganate, as in the former instances cited, acts as a chemic antidote and renders inert the poison yet unabsorbed, with which it must be brought in contact. There is absolutely nothing to warrant the view that this agent can act as a systemic or physiologic antidote to morphin or any other toxic agent. Nevertheless, cases are reported, occurring in different parts of the country, in which the permanganate is employed hypodermically, the poison having been administered by the stomach. The widespread newspaper notoriety given to this new treatment, according to it prominence immensely beyond its importance, can only be accounted for on the ground that it originated in New York city, and first appeared in the daily papers which are always eager for the sensational and the marvelous, but are poor authorities in matters of science. The most recent communication on the subject appears in the *Medical News* of May 5. It is a clinical report emanating from the Homeopathic Hospital of Pittsburg, and is entitled: "Practical Applications of Potassium Permanganate as an Antidote to Laudanum."

In this communication a case is reported, in some detail, in which it is stated that about eighty cubic centimeters two and one-half fluid ounces of laudanum, of unknown strength, had been swallowed some three hours before the patient was brought to the hospital. He was then comatose with respirations only four to the minute. In addition to the usual treatment, including coffee by mouth and rectum, and hypodermic injections of atropin, artificial respiration and so on, and when the case seemed hopeless, repeated injections of a half-saturated solution of permanganate, in doses of 2 drachms, were administered at intervals of half an hour. After the third injection, improvement was first observed, and after the fifth injection the patient became conscious and tried to articulate. With the fact that recovery was delayed by abscesses of both arms, we are not immediately concerned; the main fact is that the patient recovered, as did also two other cases, which were not so marked, and in which the same treatment by hypodermic injection of permanganate was resorted to.

From what is known of the chemic nature and physiologic effect of permanganate of potassium, we must admit that the successful use of this agent administered hypodermically, in cases of laudanum poisoning is something we were not prepared for. We can understand that when morphin which is a powerful reducing agent, is brought in contact with the permanganate, which is a vigorous oxidizer, a mutually destructive reaction would ensue. But when the morphin enters the blood where the permanganate can not possibly follow, the antagonism ceases to be available. It is possible that when hypodermically administered, although decomposed in the tissues, the nerve centers may be influenced by some of its products, but even if so, it would not be permanganate *per se*, but something else which does the work. What the active agent may be in such case, it ought not to be a very difficult matter to determine. In the meantime the distinction between a chemic and physiologic antidote must be kept in view and, above all things, we should not require of a chemic antidote that it shall be also a physiologic one.

A new antidote to morphin was not urgently demanded and it could not in fact be truthfully denominated as a "long-felt want," since the treatment already in general use is very efficient and, as a rule, is successful. But even allowing some usefulness to potassium permanganate as an antidote, when swallowed immediately after morphin has been taken into the stomach, this will not warrant the assumption that in such cases its hypodermic administration will have any beneficial effect. Certainly, we are not warranted at this stage of the investigation, in abandoning our well-known physiologic antagonists in the treatment of poisoning either by morphin or by opium or its preparations. When a human life is trembling in the balance and fatal coma is threatening, it would be criminal to lose time by experimenting with therapeutic novelties, to the exclusion of the established treatment and the "rejection of the accumulated experience of the profession." Some

might be led to do so, however, were no word of protest raised against the implication that the suggested treatment is a safe and efficient substitute for the approved methods already in use.

## THE STATE SOCIETIES.

By the time this number reaches the readers of the JOURNAL, nearly all the State societies will have held their annual meetings—meetings which, judging from the proceedings, seem to have been marked by great harmony, unanimity of sentiment and fraternal feeling. The chronic growler was there as usual, but either his voice was husky, or there was something in the atmosphere whiich prevented its resonance, for very little of him appears in the reports of the proceedings.

The time is ripe for professional organization, and the profession at last seems to have realized it in a largely increased attendance of most of the societies, notwithstanding the financial stringency of the times, which has reduced professional incomes very materially and made collection of earned bills extremely difficult. The attendance has been fully the average in most cases, and several of the societies have increased it. We have printed abstracts of the proceedings of some of them; others are to come, and it may fairly be said that at no time in the history of American medicine has the standard been higher, nor have the papers presented shown higher scientific value. With this awakening of the profession to a sense of its duty, there is little question that the local, State and national associations will steadily grow in usefulness for the profession, and exert a commanding influence on all public questions in which the profession as a whole are interested.

## THE MEDICAL DEPARTMENT OF THE NATIONAL GUARD AND OF THE ARMY.

In the *Congressional Record* of Tuesday, May 8, 1894, we find the following: *Senate Proceedings:* The Vice-President presented a memorial of members of the Medical Department of the National Guard, remonstrating against the passage of House Bill 6373, relating to the reduction of the Medical Department of the Army, which was referred to the Committee on Military Affairs. *House Proceedings:* By the Speaker (by request): Memorial of delegates from the Medical Department of the National Guard of the States to the fourth annual meeting of the United States Military Surgeons, against reducing the Medical Department of the Army, as proposed in House Bill 6373,—to the Committee on Military Affairs.

Our National Guard brethren did well in taking prompt action in a matter of such vital importance to the efficiency of the Army Medical Department, and we trust that their protest will meet with the consideration which it merits. The surgeons of the National Guard can recognize better than most medical men the importance of having, in time of war, a thoroughly educated and disciplined medical staff. The memorialists held that to keep the Army Medical Department up to its present point of efficiency, young men must be elected from time to time, educated in practical sanitation and familiarized with military methods and discipline to take the place of those who drop out by disability, age or death. A gap of eight years in the recruiting of the Department, which would be the result of the proposed legislation, would be felt harmfully for a generation to come. We trust this will not be.

## MUTUAL CONSULTATIONS ARE NOT CONFIDENTIAL.

In a murder trial where the defense is insanity and the court, upon motion of the accused, with the consent of the district attorney, appoints a physician to make an examination, and to testify on the trial, as the mental condition of the accused, the Supreme Court of Colorado holds, in the case of Nesbit v. People, decided March 7, 1894, that an examination and consultation between the accused and the physician, under such circumstances, are not confidential, and that the physician can be called by the State to testify in rebuttal, even though he has not been called by the accused. It can not be, it is said, that an accused can seek and obtain such an examination at the hands of the court, and with the consent of the prosecution, with the privilege of introducing the testimony if the result of the examination shall be favorable to him, and yet reserve to himself the power of excluding the testimony if it shall be unfavorable.

## DUTY AND POWER OF THE WISCONSIN COUNTY BOARD.

The Supreme Court of Wisconsin holds, in Rider v. Ashland County, that it is, in that State, without doubt, the duty of the county board to procure and furnish all needful medical aid and attendance to persons confined in its jail, and to such poor persons as are a county charge. It may be more convenient and cheaper to engage one physician by the year than to employ one or several by the visit, and without previous engagement. Whether the employment shall be by the year or by the visit is in the discretion of the county board. It is not a question of power, but of detail, merely.

## ASSUMPTIONS PERMITTED IN HYPOTHETICAL QUESTIONS.

Counsel are not confined to facts admitted or absolutely proved in propounding their hypothetical questions to experts. So declares the Supreme Court of Colorado in the case of Jordan v. People, decided March 7, 1894. They may assume, the court holds,

for the purposes of the questions, any statement of facts which the evidence tends to establish. It is the province of the jury to determine the truth or falsity of the assumed facts.

## CORRESPONDENCE.

### Revision of Constitution and Code.

TROY, N. Y., May 4, 1894.

*To the Editor:*—The adoption of the amendments to our Constitution, By-laws and Code of Ethics, as proposed by the special committee and printed in the JOURNAL for April 7, might induce results in some directions not apparent from a cursory examination of the subject—effects it is to be hoped not intended by the gentlemen making the majority report.

The changes are in some directions so radical it would seem that probable danger of evil would be appreciated at once, even from a cursory reading of the report, but finding on inquiry that some of my friends failed to notice the *trend* of the amendments, I concluded that the length of the document, the variety and number of subjects necessarily considered, and the separation of provisions so as not to fully disclose the extent of their relations, might confuse one not on the alert, or not familiar with such subjects.

Though the proposed amendments have received able and careful consideration at the hands of several revisers in the columns of the JOURNAL, notably by Dr. N. S. Davis, I feel that there is occasion to emphasize some of the objections which have been presented.

The title of our ASSOCIATION would imply an intention to have an organization on principles consonant with the governmental and social features of the nation, *i.e.*, it should be an *American* association.

The first radical and fundamental change provided for, consists in the abolishing of delegates—who at present are the voters at the meetings—and the introduction of a provision for a *general active and voting membership*. This would place the affairs of the ASSOCIATION in the hands of the members of the profession residing in the vicinity of the place of meeting. This amounts to an endeavor to apply the methods of the town-meeting, (invaluable in their proper spheres) to affairs having a national importance. It is consequently undemocratic, in that it would allow a small and sectional portion to act for the whole and to cite the British Association as an instance of the successful application of the proposed methods is specific and misleading, as a moment's reflection on the relative territorial extent and density of population would show.

The importance of the questions to be decided at the approaching meeting should be ample illustration of the danger which might arise in leaving the ASSOCIATION in the hands of the voters of a certain locality, which locality may by wily methods be selected for certain but concealed purposes, for language is said, at times, to conceal thoughts.

This radical change in the legislative methods of the ASSOCIATION should be considered in connection with certain other proposed amendments which are not found in direct relationship or order of verbal sequence, but are found by adding together detached but related items. Some of these disarticulated provisions give the following results:

1. It is provided that the chairman of each Section shall appoint a Nominating Committee, ("consisting, if practicable, of ex-chairmen of the Section") to nominate Section officers.

2. The Executive Committee of each Section shall consist of the chairman of the Section, and his predecessors in that office for the two years just passed.

3. The Executive Committees of the several Sections shall meet together and constitute a General Business Committee.

4. Much of the business of the ASSOCIATION is to be referred to this General Business Committee without debate.

5. This same Business (should we say *Busy*) Committee is to be the Nominating Committee.

If the revisers of the Constitution intended to offer provisions whereby the wishes of the whole profession, in all parts of the country, could find expression in the proceedings and acts, in the management of the affairs, and in the official *personnel* of the ASSOCIATION, their schemes must prove a signal failure, for a better plan for a close corporation could hardly be conceived. These provisions are in every way anachronisms, unless governmental methods are to evolute backward.

I shall not accuse the Committee of an intention to place the control of the ASSOCIATION in the hands of a few men, nor will I press my objections closer by urging that in this scheme the general practitioners, who still constitute the large majority of the profession, will find that they can have only a very limited share in the official work of the ASSOCIATION. As a matter of fact, the present organization, when contrasted with this new scheme, would illustrate a republican and representative liberty in contrast with a probable oligarchy. And all this, we were told at Milwaukee, is to be done for the interests of the ASSOCIATION and for the advancement of scientific medicine. *Is* it true that words are means for concealing thoughts? Let any one weigh carefully the natural tendency of the provisions for the government of the ASSOCIATION to which I have called attention and then consider, if it can be truthfully claimed that log-rolling has existed under our present plan of organization, what should be the estimate as to the probable evils in that direction under the new *regimé* (which would be a heptarchy, more or less).

These objections do not exhaust the subject as to the proposed Constitution, but they seem broad enough and deep enough to suffice.

And now a few words concerning the Code: I will take as my text an extract from the Milwaukee "Proem," in which they say: "The Committee deprecates all efforts to abolish, belittle, distort, ridicule, or otherwise lessen its hold upon the profession." As a matter of fact, the adoption of this *newest* Code would do each and every one of those five things, only it would come in the reverse order of their statement. It took ten years to go through a similar process in the State of New York. *Facile decensus.*

The dignified and pure English of our present Code has been the subject of frequent comment; and while wishing to avoid any mere verbal criticism of the Code reported by the Committee, I feel it is but right to state that its principal claims for credit as a composition lie in the large extracts it has received from the old Code. But, without stopping to specify such points of comparison, which though important are not of first interest, we may briefly consider a few of the radical changes from the provisions of our present Code.

In their preliminary report at Milwaukee, the Committee were at considerable pains to show that a specialist and general practitioner are not fit parties to a consultation, and the inference is that the average physician is only the guide-board to the office of the specialist, or the quasi usher for that individual.

It is submitted that no provision in a Code is necessary to show *how* a physician may relinquish the care of a patient, when the motive is purely personal, but it is proper that specialists should be kept in mind of the fact that general practitioners exist who are competent to discuss with them

questions relating to their special fields, and it should be freely conceded that there are specialists who are competent to discuss cases from the standpoint of the general physician. As a matter of common courtesy, the physician is entitled to a full consultation if he desires it, and no presumption to the contrary should be created. I believe that all well qualified and well disposed physicians and specialists will accept that proposition.

We should remember in this part of the question that the *sedilia* of infallibility abides neither with the physicians nor with the specialists, and that "honors are easy" so far as errors are concerned.

Personally, I shall insist on my right to a consultation where I am to have any professional interest in a case, though I may waive my privilege for personal reasons.

As to the provision which allows consultations with "legally qualified practitioners," the object is so apparent as to require no comment, for without the limitations made by the old Code, in most of the States it would virtually allow consultations with all the varieties of charlatans, for the *respectability* of the *licensing board* would be a matter of taste.

One word concerning patent rights and proprietary medicines. Justice is always to be honored and sought; but justice is not always to be found, particularly by a superficial consideration of a case. No honorable means for pecuniary advancement should be closed to members of the profession, but if our surgeons are to furnish a quota of itinerant venders of the latest modifications of forceps, scissors and *snares*, and specialists with stethoscopes, ophthalmoscopes, etc., or ingenious physicians with a turn for chemistry and the "main chance," should conclude to patent the latest "extract," and all be added to the hordes of non-professional representatives of business firms who now invade our offices, who is to protect the general practitioner who seems to be the natural prey of such schemes and schemers. He would need some additions to the litany of defense and deliverance.

As a matter of fact, how many instances of invention of surgical appliances can be adduced where notable pecuniary profit would naturally follow a patent, at least sufficient to justify the sorry spectacle of a scramble for success in the sale of rival inventions. There is our solution of the question, and it seems the only one, *i. e.*, if the invention is likely to be more profitable than the honors and rewards connected with strictly professional work, then let the inventor cease to practice medicine and surgery, patent his "machine," and enter upon the strictly business methods belonging to its manufacture and sale.

If we are to remain a *liberal* profession we must avoid the methods of pure commerce.

This new Code, we should remember, is practically a twentieth century code, and yet let us pause a moment, only a moment, to consider its provision relative to advertising. After following the language of the old Code so as to condemn and prohibit advertising *by the general physician*, the revisers add: "It shall not be considered a violation of the spirit of this section, however, for physicians engaged in the work of medical education, either singly or associated in colleges, or for *physicians practicing in hospitals, whether public or private, general or special, to announce the fact or allow it to be announced to the profession in the advertising pages of strictly medical journals, or for physicians devoting special attention to one of the recognized special departments of medical practice, to note the fact on their signs or private cards.*"

Who is to decide on the list of "strictly medical journals?" Let us pause and think of the deluge of that kind of literature which the postman brings almost daily. Is it not another notice to the family physician to hide his diminished and still diminishing head? Pah! The thing is offensive. The proper limitations have been fixed by long usage interpreted by the present Code, and this new provision would prove to be the thin edge of a very large wedge which would split off all that has been retained of good from the old Code in relation to the subject.

One point more and I will stop, though not for want of material for criticism—it is sadly abundant.

The Committee has stricken out all those parts of the old Code which relate to "the obligations of patients to their physicians and the public to physicians," as useless and "superfluous," according to their Milwaukee announcement. It has been the opinion of many, and the writer shares that opinion, that much good has been done, and much more might be done, by placing the Code in the hands of intelligent laymen, but the "logic of events" pursues our revisers even here, for they have devoted an Article (Article III, in Part I) to "circumstances under which physicians may properly decline to render their services," in which they refer to "reciprocal obligations of patients to their physicians." Where is the scheme or standard for their "reciprocal obligations?"

Gentlemen of the Committee: You took ample time, nearly two years, to formulate your revision of the Code, which you yourselves said should be couched "in phraseology so plain as to make it a practical, common-sense document for daily guidance in the performance of our various duties." Have you *accomplished* your work? Is your instrument philologically the equal of the one you seek to abolish? Is true liberty as loyally upheld? Have you thought that the adoption of your scheme would result in class distinctions and provide a means for class oppression? Is it possible that you contemplated a failure in the adoption of your proposed Code, but made provisions in your new Constitution which would facilitate such ethical changes in the near future? These questions are too serious for other than the most careful consideration. My own judgment is that your efforts have been misdirected and that it would have been well "had you stopped before you began."

Your obedient servant, E. D. FERGUSON, M.D.

## Electricity for Salpingitis.

CHICAGO, ILL., May 12, 1894.

*To the Editor:*—I always find it interesting reading the report of the proceedings of the American Electro-Therapeutic Association, and in the JOURNAL of April 7 an article appeared read before that body by Dr. W. B. Sprague, of Detroit, on "A Contribution to the Electro-Therapeusis of Salpingitis." As this subject is of great interest, and as I have found it especially interesting, you will pardon me if I review his article.

The pathology of tubal troubles has been so recently evolved that the therapeusis is still in the embryonic stage. Many of our leading lights declare that there can be no rational therapeusis—that there can be no remedy but extirpation—as if decapitation were a cure for cephalalgia! Yet many men have a firmer faith in nature's economy, and are seeking to aid her efforts at repair by, at least so far as possible, removing the cause. Nearly all cases are accompanied by, and most of them caused by endometritis, either acute or chronic, specific or non-specific. Since this has been established, our first duty is plainly to relieve the endometritis. To this end, many forms of treatment have been advised, but Polk's revival of Sim's conception of depletion and drainage seems to be the only one which has brought satisfactory results, and the relation of parts is such that the application of this principle to the womb produces a direct as well as an indirect influence upon the tubes—it removes the cause and relieves the

chronic congestion in those cases which bear the treatment well.

Now the severity of the measure by which it is accomplished, as taught by its author and the profession at large, has limited its applicability in the hands of even its warmest advocates. Divulsion, and curetting of an inflamed womb with inflamed adnexæ has often aggravated the inflammation, making extirpation necessary. This has seemed to the surgeon good ground for the argument that extirpation should be the first and only resort.

But Apostoli has taught us that the same results may be attained by a milder and more rational means; the intrauterine application of the negative pole of the constant current of electricity is the most reliable method we have for treating endometritis to-day, the *rationale* of which is this same principle of depletion and drainage, by the cataphoretic action of the current, aided by the trophic influence and by its constriction. Goelet has shown that the influence extends to salpingitis and, if carefully and judiciously used, is the safest and best treatment yet advocated for this affection. He says that many cases of simple inflammation of the lining membrane of the tubes will subside with the endometritis, if free drainage through the uterine canal is established and maintained, and if protection is afforded against such influences as would tend to irritate the sexual organs.

My experience leads me to indorse the foregoing most heartily, but the object of this contribution is to call attention to a modification of Goelet's treatment which has been quite successful, in a few cases in my hands. At the meeting of the Michigan State Medical Society held at Grand Rapids in 1890, I reported a case as follows:

"Mrs. H., aged 32, has had one miscarriage, but for several year previously she had suffered from pain in the right iliac region, at frequent intervals. A year ago last April she began to suffer more than ever before, and she came to me for relief. She told me, in describing her symptoms, that she had an enlargement in the side, with pain. I found this enlargement to be considerable, but the abdominal muscles were strong and I could not distinctly outline it. I diagnosed an ovarian tumor, and felt that my diagnosis was confirmed as I watched its growth in after days. But one day she came to tell me that she had had a free discharge of yellow matter after a sensation as of something giving way the night before, and the swelling was subsiding. An examination proved the correctness of her statement, and I changed my diagnosis to pyosalpinx. My treatment up to this time had been merely palliative, principally faradism, to relieve the pain. She was now comfortable, and I suspended treatment a few weeks, when the tube began to fill again. I resumed the faradism, and soon after added galvanism. On June 15 I gave twenty-five milliampères, intrauterine, negative. After three intrauterine applications, the last one sixty-five milliampères, I changed to the vaginal electrode, placed against the tube, and gave sixty-five milliampères June 29. Soon after this, there was a second discharge of pus, and relief from pain. I gave twenty-one more applications similar to the last described, before March 29, 1890, when the tube had again filled and was giving considerable trouble. I now determined to try to effect an entrance. I therefore converted my graduated uterine sound into an electrode, insulating it with small rubber tubing, and passed it into the womb. I then connected it with the negative pole of the battery and turned on ten milliampères. Turning the end of my sound toward the right cornu, I exerted gentle pressure against the point that I thought to be the proximal end of the tube. Suddenly, within five minutes, my sound slipped onward about an inch. I was startled, and thought of perforation of the uterine wall, but perceiving my patient undisturbed I decided that I had really been more fortunate than I had expected, and accomplished my purpose. So I passed the electrode still further in and raised the current to twenty-five milliampères for seven minutes. There was free discharge of pus for several days following, and renewed relief from all the symptoms. I have since introduced the sound into the tube on May 12 and 25, and on June 12, the last time in the presence of Dr. Manton, who kindly came in to confirm my diagnosis. The tube seemed quite empty of pus at the last sitting. The sound has passed more readily at each subsequent sitting, and enters to a depth of more than five inches. The patient, who is a seamstress, has not lost an hour's work from treatment and her general health is much better than a year ago." (Trans. Michigan State Medical Society, 1890).

The subsequent history shows that the patient was completely cured. The author of the above paper also gives the history of several other cases that are very interesting. Further on in his valuable paper he says: "I am aware that the possibility of entering the tubes in these cases is discredited, and I have found many cases in which I have been balked in my efforts, but I have good reason to believe that I have succeeded in several cases besides these that I have reported, and have had no untoward results following my efforts in any instance."

The author ends his paper by describing the method by means of which he effects an entrance into the tubes:

"I use an insulated Simpson sound, with the normal curve a little accentuated at the extremity. As soon as I have passed the internal os uteri, I turn the point of the instrument to the side which I wish to enter and gently follow along the bottom of the fossa until I reach the os uterinum of the tube, which is indicated by the points sliding into a slight depression. I then attach the negative conductor, turning on slowly, ten to thirty milliampères, according to the nature of the case. I exert just sufficient leverage to hold the bulbous point in firm contact with the ostium. I usually notice evidence of the cataphoretic action by the oozing of fluid from the os uteri. In those cases where I have succeeded in entering the tube I have felt the point of the electrode suddenly advance, and have immediately found it fixed, as if in a narrow canal. In some instances I have then been able to advance it from one to three inches farther, and then have felt the point in the ovarian region, with the other hand, through the abdominal wall, in several instances. After the first one or more treatments the point does not always stop at the fornix, but enters the tube readily, as was the case in the instance where Dr. Manton verified my observations. I have always exercised great care to avoid force, simply guiding the electrode, with my hand supported at the forearm. With this precaution, and the low current used, I do not think the danger of perforation is as great as is sometimes represented."

In the discussion which followed, Dr. A. Lapthorn Smith said that if this paper had been read before the Philadelphia Obstetrical Society the author would be glad to escape from the room with his life. At the same time he quite agreed with the author in his statements. He felt quite sure that the tubes can be catheterized. Dr. Wallace showed him in his Liverpool hospital six cases at one time in which he had introduced a uterine sound into the tubes. Again, he had himself frequently had cases in which fluid accumulations in the tubes were discharged spontaneously. The source of the discharge had been proven by the use of clean, dry, cotton tampons. In view of these facts, why can not we empty the tubes in the natural way through the uterus?

Dr. N. W. Weber, of Detroit, also spoke in favor of the method.

Dr. Massey said that while appreciating this conservative

surgery, it should not be forgotten that this work is for experts only. In 1888 he had himself brought the subject of treating such conditions by intrauterine negative galvanism up before the Philadelphia Obstetrical Society. He succeeded at that time in emptying a number of tubes. Dr. Sarah A. Stevenson, of Chicago, said that notwithstanding the law which has been laid down that electricity is contra-indicated whenever there is pus present, she had for a long time employed it in such conditions. Dr. Sehrung remarked that as electricity is known to cause dilatation of various apertures, it would seem that this agent would greatly facilitate the catheterization of the tubes.

Now I was tempted to review considerable of the author's paper because it is of unusual interest, and because the article might be entirely overlooked, especially by those who do not use electricity, or by those gynecologists who are of opinion that the only treatment for pyosalpinx is extirpation of the tubes.

The great law of surgery—drainage—holds good here as in other conditions, and that drainage through the uterus can be effected is, according to the above testimony and to my mind, beyond a doubt. (Though there may be some exceptions where entrance into the utero-Fallopian opening can for some reason not be effected, and which would be cases for the surgeon.) I have myself treated cases of pyosalpinx, and have seen the pus ooze out of the uterus; the last case is still in my charge but is completely recovered from that trouble.

That a sound can be passed into the Fallopian tubes in the healthy state is also, I assume, an accepted fact. Dr. E. C. Dudley, Professor of Gynecology at the Chicago Medical College, several years ago, in one of his lectures remarked: "Gentlemen, having passed a sound into the uterus a number of times and having determined positively that it is—say three and one-half inches deep, and you subsequently by turning your sound a little to one side or the other, find it suddenly slips in an inch farther without force, you can conclude that you have entered the Fallopian orifice."

Now then, as pyosalpinx is a retention of pus within the Fallopian tube, and as this pus is retained because the utero-Fallopian orifice is closed, undoubtedly by an inflammatory adhesion, from the above testimony, the experiments of Bozeman and Newman with the use of negative galvanization of fibrous strictures of the urethra, and from the well-known dissolving qualities of the negative galvanic current, we are justified in giving this treatment a fair trial. We may thereby save many tubes, and keep many women from undergoing the terrible ordeal of a laparotomy.

JOHN KERCHER, M.D.

## American Medical College of St. Louis.

*To the Editor:*—My attention has been called to an article in your JOURNAL, headed "*Stirring up the Colleges*," published in the issue of April 7. Will you do me the honor of correcting that which seems to me a great injustice to the American Medical College of St. Louis? Your informant, in speaking of the act of the Missouri State Board of Health, says, among other things, that the Dean of the American Medical College has been notified that this College does not conform to the requirements of the Board, and therefore its diplomas will not be recognized as entitling their possessors to practice in Missouri. I desire to say, that *no such notice has ever been received*, and that your article was the first information I had read on that subject. My attention was called to it by a private letter of inquiry from New York. This College has been in good standing for the last twenty years, and if an action of the kind has been taken by the Board, justice would demand that due notice be given that the College might have an opportunity to answer to the charges.

I imagine that this damage inflicted, has served as a precedent for abrupt action of other State Boards, hence the great injustice there is in it; among these the State Board of Health of Illinois, a notice of which is given in your JOURNAL of May 5. Had your correspondent in this case given the reason for their action, it would have shown more fairness. Want of proper equipment and apparatus seems to have been the basis of action with the Illinois Board. It is true that some carelessness in this regard had crept in, and when the Illinois committee visited us they came abruptly and gave us no opportunity to supply what might seem to them a deficiency. This College has been taught a lesson and has now undergone a thorough change and has equipped itself. When Boards of Health will give us their standard in these matters they will find the American Medical College perfectly willing to conform to their wishes.

Respectfully,

C. YOUNKIN, Dean.

## Reply to Dr. Worcester.

RICHMOND, VA. April 25, 1894.

*To the Editor:*—Allow me a few lines in reply to the "open" and "sweet-spirited letter" of your fair correspondent, O. E. Worcester, M.D., of Florida, in your issue of April 21:

1. The age of legal consent in Virginia is 14 years.

2. Twenty years ago I organized a Magdalen Home and have been its President ever since.

Your account of "a domestic chloroformed in a physician's office" must be taken with a "grain of allowance." I have learned to have little faith in the excuses for women's fall told by themselves. It is the old story.

3. The dishonorable doctor spoken of was not worthy of belief. Bad men always believe others as bad as themselves. This man is a slanderer of his brethren. But as I have sent your correspondent my pamphlet on "Woman's Place," where woman's power of self-protection is fully discussed, I need say no more on this subject here.

My advice to young girls going out from the Magdalen Home is to hold their persons sacred and let no man put his hand upon them. If lynching followed lying and betrayal or assault, it might be better.

4. Nine-tenths of the doctors in this city will not disobey the law you refer to. There are always "men of the baser sort," as Paul says, in every city. But I can not discuss this subject with a lady. Though an M.D. married thirty years, with ten children, yet there are some questions I would not think of discussing with my wife, from respect to her finer feelings. I claim and have proven that women are "*four times*" better and purer than men. The shrinking, instinctive modesty in woman which causes her to shun man's gaze and veil her eyes, I hope never to see removed. It is the golden shield that God has given her. No union do I want to see between the sexes, but that of holy matrimony. Familiarity is dangerous. The women at the North who expect and demand that men shall be as pure as women, don't know what they are talking about. There is no excuse for the unfaithfulness of married men. But I did not expect to say so much. Respectfully,

W. W. PARKER, M.D.

## Colorado State Medical Society.

DENVER, COLO., May 11, 1894.

*To the Editor:*—As notice has, by some misunderstanding, appeared in the JOURNAL, that the Colorado State Medical Society would entertain the delegates to the AMERICAN MEDICAL ASSOCIATION on their way to San Francisco on May 30,

it is to be regretted that, the State Society not being in session at that time, and no committee having power to take any such action, the Society will be unable to give any such entertainment.

Members and officers of the Society residing in Denver will, however, be glad to meet members of the AMERICAN MEDICAL ASSOCIATION as they pass through Colorado, and the latter are again cordially invited to become the guests of the Colorado State Society during its session, June 19 to 21, on their return from the Coast.

Yours very truly,
J. N. HALL, Chairman Executive Committee,
Colorado State Medical Society.

## ASSOCIATION NEWS.

**The Association Train** will leave Chicago Monday, May 28, via Santa Fe R. R., Rio Grande Western, and Southern Pacific, for San Francisco via Denver, Colorado Springs, Leadville, Manitou, Glenwood Springs, Salt Lake, Ogden, Truckee and Sacramento. Returning, after the meeting, the train will pass through Sacramento and Northern California to Portland, thence east by way of the Northern Pacific R. R. to St. Paul. C. M. & St. P. R. St. Paul to Chicago. A stop over at Yellowstone National Park for those who desire it has been arranged, and it has been understood that at several places on the journey there will be short stops. President Hibberd's party in a special car join the train at Chicago, and the St. Louis party are expected to join at Kansas City. From all points east and south, concentrating on this train should be effected at Chicago and St. Louis. For all information relating to this train, fares, etc., address J. M. Connell, 212 Clark st., Chicago, or any agent of Santa Fe line in other cities. Rates promised are the lowest excursion rates at time of departure.

This is the only route on which arrangements have been perfected by the Trustees.

**Program for Section on State Medicine.**—The Prevention of Diphtheria, from the standpoint of the Health Officer, U. O. B. Wingate, Milwaukee, Wis.

Diphtheria, Andrew W. Imrie, Detroit, Mich.

On the Principles of Sanitary Science, the Chief Obstacles to their Practical Application, and the most Efficient Means for the Removal of such Obstacles, N. S. Davis, Chicago, Ill.

A Study of Impure Air in the Causation of Inebriety, T. D. Crothers, Hartford, Conn.

State Medicine in the United States, What is it? P. C. Remondino, San Diego, Cal.

State Medicine, its Relation to Patent Medicine, Sam'l. P. Duffield, Detroit, Mich.

The Physician and State, Chas. E. Winslow, Albuquerque, N. M.

Leprosy, H. S. Orme, Los Angeles, Cal.

Restriction of Tuberculosis, J. H. Davison, Los Angeles, Cal.

Consumption and its Prevention, Winslow Anderson, San Francisco, Cal.

Cleanliness as the Chief Antiseptic, C. F. Ulrich, Wheeling, W. Va.

The Bath in Modern Medicine, Chas. H. Shepard, Brooklyn, N. Y.

Drinking Water, Hal C. Wyman, Detroit, Mich.

Transportation Companies as Disseminators of Contagion, S. S. Herrick, San Francisco, Cal.

Vaccination and Re-Vaccination, Ezra M. Hunt, Trenton, N. J.

To be announced, Walter Wyman, Surg.-Gen. M.H.S.

To be announced, J. H. Kellogg, Battle Creek, Mich.

To be announced, Lawrence Flick, Philadelphia, Pa.

To be announced, Jas. A. Steuart, Baltimore, Md.

To be announced, F. H. De Vaux, Valley City, N. D.

**Section on Obstetrics and Diseases of Women.**—Dr. Joseph Eastman, Chairman of the Section, will deliver the Annual Address. The following papers will be presented:

Treatment of Fibroid Tumors of the Uterus, Franklin H. Martin, Chicago, Ill.

The Pedicle in Abdominal Hysterectomy, A. H. Cordier, Kansas City, Mo.

Removal of Fibroid Tumors through the Abdomen, E. E. Montgomery, Philadelphia, Pa.

Placenta Prævia, Llewellyn Eliot, Washington, D. C.

The Influence of Gestation upon Chronic Diseases of the Kidney, T. Ridgeway Barker, Philadelphia, Pa.

Tetanus Puerperarum, Allison Maxwell, Indianapolis, Ind.

Some of the Uses of Strychnia in Obstetric Practice, John Milton Duff, Pittsburg, Pa.

Status of the Means to Banish the Pain in Parturition, William B. Dewees, Salina, Kan.

Symphyseotomy, with Case, W. Winterberg, San Francisco, Cal.

Recto-Vaginal Fistula, its Etiology and Surgical Treatment, Augustus P. Clarke, Cambridge, Mass.

Suspension of the Uterus in Extreme Anterior Displacements, H. R. Holmes, Portland, Oregon.

A Plea for Thorough Training in Obstetrics and General Medicine on Part of the Gynecologist, Henry Parker Newman, Chicago, Ill.

A Case of Didelphic Uterus, Unilateral Hematometra, Hemasalpinx and Hematocolpos, X. O. Werder, Pittsburg, Pa.

A Case of Gangrene of the Mammary Glands, J. Schneck, Mt. Carmel, Ill.

Emmett's Inside Operation, Joseph Price, Philadelphia, Pa.

What Causes Relate to the Unsatisfactory Results following the Removal of Diseased Uterine Appendages. Hugo O. Pantzer, Indianapolis, Ind.

Ovarian Pain, O. B. Will, Peoria, Ill.

## SOCIETY NEWS.

**New York State Medical Association.**—The Fifth District Branch of the New York State Medical Association will hold its tenth annual meeting in Wurzler's Building, 315 Washington Street (near City Hall Square), Brooklyn, on Tuesday, May 22, 1894.

The morning session will be called to order at 11 A.M., and will be devoted to the President's Address, On the Prevention of the Disagreeable and Dangerous Symptoms produced by Ether as a General Anesthetic.

Biographical sketches of the late Dr. W. T. White, by John Shrady; Dr. John Young, by C. M. Kittredge; Dr. Wm. Govan, by I. D. LeRoy; Dr. M. K. Hogan, by Wm. O'Meagher; Dr. A. L. Carroll, by E. S. F. Arnold, J. W. S. Gouley, G. T. Harrison, C. A. Leale, A. Lukens, Stephen Smith, J. G. Truax, W. C. Walser.

A scientific paper on the Dietetic Treatment of Consumption, will be read by Dr. T. J. McGillicuddy.

The afternoon session will be called to order at 2 P.M., and will be devoted to the remaining scientific papers:

The Treatment of Chronic Oophoritis by Electricity, Edward Sanders. Discussion opened by L. G. Baldwin, of Brooklyn.

Report of a Case of Chronic Peritonitis with Intestinal Fistula. Celiotomy. Enterorrhaphy. Recovery, Frederick Holme Wiggin.

General Discussion of Vaccination. Opened by F. A. Jewett, S. E. Jelliffe and H. H. Morton, of Brooklyn.

The Nominating Committee will then make its report on members of the Executive Committee for the ensuing year.

**Association of American Physicians.**—The ninth annual meeting of the Association of American Physicians will be held in connection with the third Congress of American Physicians and Surgeons, at Washington, D. C., May 29, 30 and 31, and June 1.

President's Address, Reginald H. Fitz, Boston.

The Treatment of Certain Symptoms of Croupous Pneumonia, particularly in Adults, Beverly Robinson, New York.

A Treatment of Typhoid Fever, Samuel A. Fisk, Denver.

Six Cases of Traumatic Headache, C. F. Folsom, Boston.

Clinical Report of Two Cases of Raynaud's Disease, Frederick P. Henry, Philadelphia.

Dr. S. C. Martin's Researches on the Bacteria of Vaccinia, Harold C. Ernst, Boston.

Morphology as a Factor in the Study of Disease, Opened with a paper by Harrison Allen, Professor of Compara-

tive Anatomy in the University of Pennsylvania, and discussed by Thomas Dwight, Professor of Anatomy in the Harvard Medical School, Dr. Frederic H. Gerrish, Professor of Anatomy in Bowdoin College, Dr. Frank Baker, Professor of Anatomy in the University of Georgetown, and Burt C. Wilder, Professor of Physiology, Comparative Anatomy and Zoölogy in Cornell University.

Modification, Temporary and Permanent, of Physiological Characters of Bacteria in Mixed Cultures, Theobald Smith, Washington.

The Effect of Various Metals on the Growth of Pathogenic Bacteria, Meade Bolton, Baltimore.

Note on the Observation of Malarial Organisms in Connection with Typhoid Fever, W. Gilman Thompson, New York.

Experiments in Artificial Melanosis, George Dock, Ann Arbor.

Stomatitis Neurotica, A. Jacobi, New York.

Tetany in America, J. P. Crozer Griffith, Philadelphia.

Sewer Gas, The Bacteriology, by Alexander C. Abbott, First Assistant in the Laboratory of Hygiene, University of Pennsylvania; As a Cause of Disease, by Abraham Jacobi, Professor of Diseases of Children in the College of Physicians and Surgeons in New York City.

The Distribution and Control of Leprosy in the United States: The Distribution. Opened with a paper by J. Nevins Hyde, Chicago, and discussed by Wm. C. Haraway, St. Louis, and James E. Graham, Toronto. The Prophylaxis and Treatment, opened with a paper by Jas. C. White, and discussed by George H. Fox, New York City, W. C. Wyman, U. S. M. H. Service, and Joseph D. Bryant, New York City.

Lead Palsy in Children, Wharton Sinkler, Philadelphia.

A Study of the Temperature in Cerebral Apoplexy, Charles L. Dana, New York.

The Mild Character and Diminished Prevalence of Syphilis and the Infrequency of Visceral Syphilis, John H. Musser, Philadelphia.

Some Remarks on the Significance of Albumin and Casts, especially in those past Middle Life, Frederick C. Shattuck, Boston.

Experimental Phthisis in the Rabbit with Formation of Cavities: A Demonstration, T. M. Prudden, New York.

A Report of the Ultimate Results obtained on Experimental Eye Tuberculosis by Tuberculin Treatment and Anti-Tubercular Inoculation, E. L. Trudeau, Saranac Lake.

Nephritis in its Surgical Aspects: Opened by a paper by Edward L. Keyes, of New York City, followed by a paper from George M. Sternberg, Surgeon-General U. S. Army, on the Bacteriology of Nephritis, and discussed by George Chismore, of San Francisco, Cal., L. Bolton Bangs, New York City, Francis S. Watson, Boston, Mass., and W. N. Wishard, of Indianapolis, Ind.

The Conservative Surgery of the Female Pelvic Organs. Papers will be read by Wm. M. Polk, of New York, and Wm. Goodell, of Philadelphia.

Address by the President of the Congress, Alfred L. Loomis, on the Influence of Animal Experimentation on Medical Science.

Some of the Chemical and Bacteriological Characteristics of Milk, Thomas M. Rotch, Boston.

The Chemical Products of the Anerobic Putrefaction of Pancreatic and Hepatic Tissues, and their Effects upon the Tests for Morphia, Victor C. Vaughan, Ann Arbor.

Gastro-Enteric Rheumatism, H. M. Lyman, Chicago.

A Case of Osteomalacia, George Dock, Ann Arbor.

A Case of Calculous Pyelitis with Invasion by the Bacillus Lactis Ærogenes, J. H. Musser, Philadelphia.

The Surgery of the Accessory Sinuses of the Nose: To be discussed by J. Solis-Cohen, Philadelphia. F. I. Knight, Harvard, George M. Lefferts, New York City, F. H. Bosworth, Dr. William C. Glasgow, of St. Louis, and E. Fletcher Ingals, of Chicago.

The Influence of Infectious Processes on the Nervous System: Pathology and Etiology, Jas. J. Putnam. The Relation to General Nervous Diseases, E. C. Seguin, of New York; the Relation to Mental Disease, by Charles K. Mills; the Therapeutics, by F. X. Dercum, of Philadelphia.

## PUBLIC HEALTH.

**A Leper Hospital.**—At the request of the Senators and Representatives from Louisiana, the Secretary of War has given New Orleans and the State the right to use the Government military reservation at Fort Pike for a hospital for lepers and contagious disease patients.

**Quarantine on the Great Lakes.**—Ohio, Indiana, Michigan, Wisconsin and Illinois, through the executive officers of their respective State Boards of Health, have adopted the following:

*Resolved*, That no vessel plying on the lakes should be allowed to enter any port within the boundaries of our respective States without having on board, subject to inspection, a bill of health, duly signed by an officer of the United States Marine-Hospital Service.

**Yellow Fever Precautions.**—A State disinfecting station has been ordered by the Florida State Board of Health to be established at Fernandina, Fla., similar to that at Mullet Key. Port physicians are on duty at Fernandina, Mayport, Key West, Punta Rossa, Punta Gordo, Port Tampa, Apalachicola and Pensacola, and strict inspection of all vessels is enforced. The Jacksonville Sanitary Association reports a balance of yellow fever funds in its treasury amounting to $26,545.33, drawing 4 per cent. interest. It contributed $2,000 to the relief funds of Brunswick, Ga., and other places last year.

**"Membranous Croup" vs. Diphtheria.** — Dr. H. M. Biggs, the bacteriologist of the New York City Board of Health, has been led, as a result of his recent examinations, to recommend that so-called membranous croup be included in the list of contagious diseases. In the bacteriologic examinations of 286 cases reported as "membranous croup," 229—or about 80 per cent—were proved to be true diphtheria by the existence of the Klebs-Löffler bacillus. Of the remaining 57 cases, 40, or only 14 per cent. of the total number, were clearly not true diphtheria, and 17, or 6 per cent., were doubtful.

**Cholera in Europe.**—It is not even "cholerine" now in Lisbon, according to late cable dispatches; what was so reported at first and subsequently was pronounced by Medical Director Montaldo of Madrid, after a personal investigation, to be Asiatic cholera, it is now asserted, on the authority of the Austrian Consul-General at Lisbon and the Portuguese Minister at Washington, is only diarrhea and "absolutely dangerless." Meanwhile, from time to time, there continues to be received more or less definite reports of the westward extension of the disease from Russia and Turkey through Austria to the Iberian peninsula and to France.

**Smallpox in Chicago.**—Chicago continues to be the center of interest with respect to smallpox. Contrary to expectation the milder weather has caused no diminution in the number of new cases reported daily; there was an increase of 17.3 per cent. in the second, as compared with the first, week of May, and of 37.5 per cent. in these two weeks as compared with the month of April. The total number of cases reported between January 1 and May 14 is 1,559. The growth of the epidemic during this period is shown in the following figures—to which are added, for purposes of comparison, the figures for the corresponding period in the epidemic of 1881-83.

| | 1894. | 1881. |
|---|---|---|
| Daily average of new cases in January | 4.1 | 2.6 |
| " " " " February | 8.3 | 3.5 |
| " " " " March | 9.8 | 3.2 |
| " " " " April | 18.1 | 4.4 |
| " " " " May | 24.9 | 2.7 |

Percentage of increase or decrease:

| | 1894. Increase. | 1881. Increase. | Decrease. |
|---|---|---|---|
| February as to January | 102 6 | 34.6 | . . |
| March as to February | 18. | . . | 8.5 |
| April as to March | 82.6 | 37.5 | . . |
| May as to April | 37.5 | . . | 38.6 |

Increase of May over January, 1894, 507.3 per cent.
" " " " 1881, 4.6 "

As heretofore remarked, the result of this comparison is

not reassuring—especially in view of the fact that the epidemic of 1881–83 did not reach its height until January, 1882, when there were 1,038 cases, and did not finally die out until September, 1883, with a tale of 6,786 cases, 2,518 deaths, an actual money cost of $940,948.80, reported and a constructive cost of $5,528,122.66, exclusive of the aggregate of misery, suffering and loss of life. Chicago is now three times larger than then and can well afford to spend whatever sum is necessary to prevent a repetition of that experience. The municipal authorities have at last awakened to a comprehension of the gravity of the situation and have given the Health Commissioner, Dr. A. R. Reynolds, plenary authority and resources, hitherto wanting. On the 13th a proclamation was issued ordering the vaccination of "all persons within ten days from this date;" there has been a large increase of the vaccinating corps and of the quarantine police force; hospital accommodations have been enlarged, so that every case of smallpox may be removed at once; the "sweat shop" district has been put under the direct supervision of the State Board of Health; and the U. S. Marine-Hospital Service of the port, under charge of Dr. Hamilton, inspects every vessel before it leaves the harbor.

The following is the form of the bill of health furnished:

BILL OF HEALTH.—Marine-Hospital Service, District of the Great Lakes. Surgeon's Office, Port of Chicago, Illinois.——189.

*To Whom it May Concern:* This is to certify that I have this day carefully inspected the——of——whereof Captain——is Master, and have inspected the passengers and crew. The crew have been vaccinated.

I further certify that the vessel and its cargo are in good sanitary condition, and that none of the passengers or crew are suffering from any contagious disease. JOHN B. HAMILTON, Surgeon U. S. M.-H. S.

By——Surgeon U. S. M.-H. S., Inspector

No. of crew——No. of passengers——No. of officers——.

## BOOK NOTICES.

**Essentials of Practice of Pharmacy.** Arranged in the form of questions and answers, prepared specially for pharmaceutical students. Second edition, revised by Lucy C. Sayre, Ph.G., Professor of Pharmacy and Materia Medica, University of Kansas. Philadelphia: W. P. Saunders, 1894. Price $1.00. An excellent book of its class.

**Manual of Practical Obstetrics.** By EDWARD P. DAVIS, A.M. M.D., Professor of Obstetrics and Diseases of Infancy in the Philadelphia Polyclinic, etc. Second edition, revised and enlarged with 134 illustrations. Philadelphia: P. Blakiston, Son & Company, 1894. Chicago: E. H. Colgrove & Co. Price $2.50.

When the first edition of this book appeared we commended it as being a concise summary of obstetrical knowledge. The illustrations are good and the teachings fully abreast of the time. We note that the author lays less stress on antiseptic treatment of the cord than modern teachings would seem to indicate. With the exception of this slight omission there is nothing to criticize.

**An Aid to Materia Medica.** By ROBERT H. M. DAWBARN, M.D. Professor of Operative Surgery and Surgical Anatomy, New York Policlinic. Third edition, revised and enlarged by Woolsey Hopkins, M.D. New York: G. P. Putnam & Sons. 1894.

The preface to this book states that "this revision of the book was made necessary by the changes in the last United States Pharmacopœia. The book aims to present in a brief space in tabular form all the drugs and preparations recognized by the Pharmacopœia. It is interleaved for the convenience of the physician. It contains the doses and the decimal system, as well as the old English form, with samples of prescription writing in the metric system. The little book will be found extremely useful.

**Seventh Annual Report of the State Board of Health and Vital Statistics of the Commonwealth of Pennsylvania, 1891.** Harrisburg. Paper, pp. 1,044. The same, 1892, pp. 785.

The work of our State Boards of Health is an index of the general intelligence of the community. Great praise is due to the manifest zeal and wisdom in action of this Board, yet we can but feel that the thousands of intelligent citizens of the great State of Pennsylvania, and especially the members of the medical profession, have failed in their duty to the State by not insisting upon an appropriation that would have a moderate relation to the needs of the community. As it is, any emergency finds the Board wellnigh helpless.

We find much of present interest and of permanent value in these pages. Every practitioner should regard himself as an assistant of the Board of Health, and nowhere so well as in these records can he read the lessons taught by loss of life due to lack of cleanliness and of care for infectious disease.

The reports of proceedings of the American Public Health Association, of the Section on State Medicine of the AMERICAN MEDICAL ASSOCIATION, and of the Pennsylvania State Sanitary Convention, and a Compendium of the laws of Pennsylvania relating to Public Health and Safety find a place in these volumes, and enhance their permanent value.

The first volume contains the report of the Secretary of the Board and minutes of meetings, and twelve appendices comprising reports of standing committees, of inspections, annual reports of cities, reports of conferences and conventions, articles on quarantine, disinfection, epidemics and special sources of disease, circulars issued by the Board, a compendium of laws relating to public health and safety, etc.

The second volume contains the report of the Secretary for 1892, minutes of meetings and appendices including reports of committees, of inspections, articles on quarantine, disinfection, epidemics and special sources of disease, reports of conferences and conventions, circulars issued by the Board, annual reports of cities, etc.

## NECROLOGY.

BEN. DAVIS, M.D., New Holland, Washington, April 25.——M. G. Osborn, M.D., Delmar, Iowa, April 23.——T. T. Dorwin, M.D., Decatur, Ind. He had been retired from practice for some time and for the last ten years had been President of the Decatur National Bank.——M. L. Malory, M.D., of Rochester, N. Y., April 28.——W. H. Carruthers, M.D., of Northfield, Minn., May 1.

WM. V. KEATING, M.D., died suddenly at St. Joseph's Hospital, Philadelphia, immediately after making a brief address to the graduating class of trained nurses. At a special meeting of the Hospital Staff, April 20, the following action was taken:

It was with peculiarly painful, tender and reverent feeling that the Medical Staff of St. Joseph's Hospital assembled to pass resolutions in memory of their most distinguished colleague and beloved President, Dr. William V. Keating, who for nearly fifty years has faithfully served the Hospital, with no recompense except the approval of his own conscience and the gratitude of those whose hearts were in the service of the same Divine Master.

Dr. Keating was interested in the Hospital even prior to its foundation, securing funds by personal effort and his own generosity, and since by his professional eminence aiding, and always giving unsparingly of his time, effort and wisdom.

To him the Sisters of the Hospital went freely, always sure of wise counsel in perplexity and sympathetic assistance in every effort to advance the Hospital in the efficiency of its charitable work. He was alive to every professional advance, and in singleness of heart he labored to place those institutions with which he was connected always abreast of the times.

That his ripe wisdom and his last strength and hour should be expended in the service of that institution to which he gave freely his youthful vigor, has in it an impressive example of duty performed to the end.

"Dr. Keating died shortly after addressing a few encouraging words to the class of nurses in training, making his remarks brief because of the illness he felt suddenly overwhelming him.

To the gentle Sisters was given the opportunity to render the last services to their old friend and benefactor of years—moments pitifully brief, yet not without their consolation.

The Staff passed the following resolutions:

*Resolved*, That in the death of Dr. William V. Keating the medical profession has lost a man of most distinguished ability, who has reflected honor upon the profession alike by his attainments, his spotless integrity and loftiness of character.

*Resolved*, That St Joseph's Hospital has lost a friend whose labor and far reaching influence will long be felt.

*Resolved*, That we, as a Staff, have lost a true friend, whose example of professional culture, high bred and delightful courtesy, untiring devotion to duty, kindness and purity of heart we will hold in reverent memory.

*Resolved*, That the Sisters of Charity and all friends of the sick poor have lost an efficient and sympathizing helper.

*Resolved*, That we publish and communicate to the family of the deceased the sentiment and resolutions of this meeting.

## MISCELLANY.

**Change of Address.**—Dr. W. L. Schenck, of Kansas, to New Castle, Colo. Dr. E. J. Doering to Hotel Metropole, Chicago.

**Gladstonian Nerve.**—The anecdotes regarding the Grand Old Man are beginning to pile up, now, in suitable commemoration of his marvelous public career that is now drawing to a close. Mr. Smalley, the well-known correspondent of the New York *Tribune*, stands sponsor for the following medical narrative of a man who never knew what fear meant:

"Mr. Gladstone is now staying at Biarritz. The day before he left he called on Dr. Granger, who has succeeded Sir Andrew Clark as the Premier's physician, and who is also an oculist. He told Mr. Gladstone that a cataract had obliterated the sight of one eye and that another cataract had begun to form on the other. The Prime Minister reflected a moment, and said: 'I wish you to remove the cataract at once.' The physician replied that it was not yet far enough advanced for an operation. 'You do not understand me,' answered the Premier; 'it is the old cataract I wish removed. If that is out of the way, I shall still have one good eye when the new cataract impairs the sight of the other.' As the physician still hesitated, Mr. Gladstone continued: 'You still seem not to understand me. I want you to perform the operation here and now, while I am sitting in this chair.' 'But it might not be successful,' said Dr. Granger. 'That is a risk I accept,' was the instant reply."

**Ambroise Pare Accused of Poisoning his King.**—Lately there has appeared in Paris an admirable medico-historical sketch of the diseases and death of Francis II, of France, by Dr. Albert Potiquet. The King was sickly from infancy, but he was sufficiently robust to pass successfully through an attack of variola when four or five years of age. His death was probably caused by the extension of mid-ear trouble to the brain. Among his surgical attendants was Ambroise Paré, who was present when a consultation was held for the purpose of determining the question of trephining the King's cranium. The operation was adjudged to be unnecessary.

Very soon after the King's demise certain partisans began to insinuate that that event had been brought about by poison. A writer in the *Lancet-Clinic* gives the following statement of the way in which the name of the great Paré came to be brought into the matter:

"Writers more inspired by passion than by love of truth sought to accredit the death to poisoning. They went so far as to affirm that Ambroise Paré, the illustrious and irreproachable surgeon, was the principal factor in the monstrous crime. But it was not necessary to seek so far for an explanation when we read Dr. Potiquet's work, for we find that Francis II not only died poisoned but lived poisoned; he had septic fever, and the pus, finding no exit without, naturally went in. The death was only the epilogue of this suppuration, left to itself, and not let out. As if he feared a doubt might remain in some minds, Dr. Potiquet asked if any other diagnosis than that of *adenoid vegetations* can be found. Had it been from syphilis or fetid rhinitis these affections would have been revealed by symptoms that could not have passed unperceived. Could the malady have arisen from nasal polypi? A polypus of the nose is apt to project and be perceptible at the exterior, and is, besides, a rare thing in an infant. Adenoid vegetations, on the contrary, are more frequent in the first childhood than even later. It is, then, highly probable that at this distance we can affirm with certainty that Francis II died of meningo-encephalitis, consecutive to a suppurating inflammation of the left ear connected with adenoid vegetations. This diagnosis, disengaged from all contiguities, reposes on a rigorous scientfic basis. Moreover, in deficiency of the truth, it presents all the attributes of likelihood. We should, then, be easily dissatisfied were we not to agree with Dr. Potiquet."

**An Epileptic Colony for New York.**—The Legislature of New York has passed, and the Governor signed the bill establishing a colony for epileptics in that State. The colony is named after the late Oscar Craig, President for some years of the State Board of Charities. The bill provides for the purchase of a tract of 1,875 acres of beautiful land in the Genesee Valley, near Mount Morris, in Livingston County. This tract is all in one piece, well watered by brooks, and consisting of fine fields, woodland and orchards, and already provided with picturesquely-grouped buildings to the number of thirty-five. It has been a colony of the Christian Believers for twenty or thirty years, and is, therefore, perfectly adapted to its new use.

The law requires that all of the buildings put up should be on the village plan. A board of five managers is provided for, and these have already been appointed.

The Governor appointed as the Board of Managers: Dr. Frederick Peterson, of New York; Mrs. C. F. Wadsworth, of Geneseo; Geo. M. Shull, of Mount Morris; Dr. Chas. E. Jones, of Albany, and W. H. Cuddeback, of Buffalo.

An important provision in the bill is that the Managers may accept any bequests of persons interested in the welfare of epileptics, and it is believed that many charitable wealthy people will build cottages upon the splendid sites on the tract to bear their names and exist as lasting memorials to their desire to serve humanity in this wise.

A medical superintendent, steward, matron, pathologist, nurses, school-teachers, teachers of various industries and arts, and so on, are to be appointed as needed; but the colony will not be ready probably to receive patients before the autumn of 1895.

It is thought that the colony will ultimately number 1,500 to 2,000 members. As soon as possible the 600 epileptics in the county almshouses will be taken in charge. Later, private patients will be received at prices corresponding to the accommodations asked for. It is sure to become self-supporting in the course of time, and to grow into an industrial and agricultural village that will more than rival the similar and famous colony at Bielefield, Germany, upon which this is, to a certain extent, modeled.

At their organization, in Albany, on May 3, the Board of Managers made Dr. Frederick Peterson, of New York, President, and George M. Shull, of Mount Morris, N. Y., Secretary of the Board.

### Washington Notes.

Miss Roberta M. West, Superintendent of the Emergency Hospital, formerly of the Philadelphia Hospital, has been appointed editor of the "American Text-book of Nursing."

The New Law in the District of Columbia requires druggists to sell whisky or other liquors only on physicians' prescriptions. Forgeries for obtaining drinks are becoming very frequent.

Columbia Medical College.—The commencement exercises of the Columbia Medical College followed by Faculty dinner took place May 3. General prize of $50 awarded to Gottlieb Werhle; clinical medicine to W. S. Washburn; clinical surgery, Miss C. Kiefe.

Association of Military Surgeons.—The fourth annual meeting of the Association of Military Surgeons of the United States was held May 3 (proceedings published in last week's Journal), and was a grand success. To Dr. George Henderson, of Washington, Chairman of Committee of Arrangements, and Dr. Henry A. Robbins, of Washington, Chairman Committee of Finance, is due this grand success. Transactions are to be printed and sent to members. The addresses by President Cleveland, Commissioner Ross and Dr. Senn were the features of the first day's session.

THE COXEY CAMP still appears to be exempt from the sanitary laws here in vogue. The manure is being turned up and removed and the underlying ground saturated therefrom is being covered with ashes. No disinfectives have been used so far. Neighboring vacant houses and the ground in the camp enclosure will not be much longer used for privy purposes as a permit has been taken out to make sewer connections. Alternations of rain and hot sun have the usual effect upon the health of the men, who wear the same clothing day and night and sleep on straw, wet and soiled, on the ground. There is no water in the enclosure and the supply, depending on the manual labor of the men, is naturally very limited. The bath is unknown. The burning and scalding of clothes together with incessant scratching of the body is very suggestive. The men are very quiet and well disposed, being of a very low intellectual capacity, and appear to be entirely satisfied with their lot (wet straw bedding, bad food and bad emanations). Speeches at night by the officers of the army serve to attract a large number of persons to the unhealthy enclosure and surroundings. There is also a constant throng of visitors during the day. The valuable horses have been removed to healthy quarters though the work horses still remain. The men were entirely wet by the severe rain last night and had to stand or walk about until this morning. The hardships from this pest hole can not be imagined, and ordinary charity should suggest their removal to some healthy place. Many of the men are sick and complaining, and there is every indication of an epidemic which may extend, through the visitors, to the entire city.

### Philadelphia Notes.

DR. WM. H. PARISH has been appointed Medical Director of St. Agnes Hospital, in place of Dr. Wm. Keating recently deceased.

THE CITY BOARD OF HEALTH has begun a house-to-house inspection in order to prepare in time for a possible invasion of cholera next summer. Circulars of information regarding tuberculosis have been printed for free distribution, in which especial attention is directed to the infectious character of the disease, and the importance of destroying or disinfecting the sputa. Although there are only four or five cases of smallpox in the whole city, the Board has ordered all the school children to be vaccinated.

THE SEMI-ANNUAL CONVERSATIONAL MEETING of the Philadelphia Pathological Society was held on the 26th ult., when Dr. Simon Flexner, Associate in Pathology in Johns Hopkins University, delivered an address entitled: "An Experimental Study of the Nature and Action of certain so-called Tox-albumins," which was most interesting and instructive. After the meeting a reception was tendered Dr. Flexner at the University Club.

THE SECTION ON GENERAL SURGERY of the College of Physicians had a very interesting program at its meeting on the 11th inst. Dr. J. Wm. White read a paper on "Appendicitis," the surgical discussion being opened by Dr. Robert F. Weir, of New York, the medical side being opened by Dr. William Pepper. A general debate followed. Dr. Joseph Leidy reported two cases of appendicitis complicated by glycosuria, and Dr. Thomas G. Morton also reported a case of appendicitis with glycosuria. "Gunshot Wounds of the Brain" was presented by Dr. Jos. Hearn and two cases reported, illustrating treatment. Dr. Thomas G. Morton presented an improved aseptic ward carriage, for hospital use.

THE ATTENTION of the Board of Education having been directed to the possible spread of contagious diseases among the younger school children from the clay used in modeling in kindergarten work, the subject was referred to the Committee on Hygiene, of the Board. This Committee has just reported that they had been unable to discover an instance of the communication of skin diseases or infection in the schools of this district; that clay itself is antiseptic, and that with ordinary care the same clay can be used over and over again, almost indefinitely, without any risk of communicating infectious disease. They insist, however, as a matter of cleanliness, that children shall be forbidden to put the clay to their mouths or use spittle to moisten it; freshly boiled water only should be used for this purpose.

## THE PUBLIC SERVICES.

**Army Changes.** Official list of changes in the stations and duties of officers serving in the Medical Department, U. S. Army, from May 5, 1894, to May 11, 1894.

Major WILLIAM E. WATERS, Surgeon U. S. A., is granted leave of absence for two months, to take effect on or about July 1, 1894.

Capt. WILLIAM G. SPENCER, Asst. Surgeon, will report in person to the President of the Army Retiring Board at Omaha, Neb., at such time as he may designate, for examination by the Board.

First Lieut. JOHN S. KULP, Asst. Surgeon, is relieved from duty at Ft. Sheridan, Ill., and ordered to Ft. Spokane, Washington, for duty.

First Lieut. GEORGE M. WELLS, Asst. Surgeon, will proceed to Ft. Bowie, A. T., and report for temporary duty, not later than the 15th instant, during the absence on leave of Capt. JEFFERSON D. POINDEXTER, Asst. Surgeon.

Major JOSEPH R. GIBSON, Surgeon, is granted leave of absence for twenty days, to take effect on being relieved from duty at David's Island, N. Y.

First Lieut. BENJAMIN L. TEN EYCK, now on temporary duty at Ft. Clark, Texas, is assigned to duty at that post.

First Lieut. WILLIAM F. LIPPITT, JR., Asst. Surgeon, is relieved from duty at Camp Eagle Pass, Texas, and ordered to Ft. Leavenworth, Kan., for duty.

Captains GEORGE H. TORNEY and LOUIS W. CRAMPTON, Asst. Surgeons, will report in person to Col. CHARLES H. ALDEN, Asst. Surgeon-General, President of the examining board appointed to meet at the office of the Surgeon-General U. S. A., on Tuesday, May 8, 1894, at such time as they may be required by the board, for examination as to their fitness for promotion.

First Lieut. HUGAN E. MCVAY, Asst. Surgeon, par. 2, S. O. 86, A. G. O., April 12, 1894, assigning him to station at Angel Island, Cal., is revoked. He will be relieved from duty at Ft. Huachuca, Ariz., and will report for duty at the Presidio of San Francisco, Cal., relieving First Lieut. CHARLES WILCOX, Asst. Surgeon, who, on being thus relieved, will report for duty at Angel Island, Cal.

**Navy Changes.** Changes in the Medical Corps of the U. S. Navy for the week ending May 12, 1894.

Surgeon R. A. MARMION, hold himself to relieve Medical Inspector G. A. BRIGHT, on the U. S. S. "Newark."

Surgeon G. E. H. HARMON, to the U. S. S. "Monongahela," June 15, 1894.

Asst. Surgeon W. M. BARNUM, to the U. S. S. "Monongahela," June 1, 1894.

Surgeon J. M. STEELE, from the U. S. S. "St. Louis," and to League Island Navy Yard.

Surgeon H. G. BEYER, from Naval Academy, and to the "Bancroft."

P. A. Surgeon CLEMENT BIDDLE, from League Island Navy Yard, and to Marine Rendezvous, Philadelphia, Pa.

Asst. Surgeon J. F. LEYS, granted one month's leave, with permission to go abroad.

### LETTERS RECEIVED.

(A) Andrews, B. J., Burlington, Vt.; American Druggist Pub. Co., New York City.

(B) Beman, W. W., Ann Arbor, Mich.; Boise, Eugene, Grand Rapids, Mich.; Bernd, H. & Co., St. Louis, Mo; Baker, Jas. B., Charlottesville, Va.; Bennett, T. J., Austin, Texas; Buechner, W. H., Youngstown, Ohio.

(C) Coffin, Lawrence, Brooklyn, N. Y.; Carhart, J. W., La Grange, Texas; Cutter, E. and J. A., New York City.

(E) Elmere, J. H., Osage City, Kan.; Eastman, Joseph, Indianapolis, Ind.

(G) Graham, D. W., Chicago, Ill.; Green, Mrs. C. R., Wonewoc, Wis.; Grafton, J. J., Chicago, Ill.; Guild, Wm. H. & Co., Boston, Mass.

(H) Hummel, A. L., Philadelphia, Pa., 2; Hibberd, J. F., Richmond, Ind.; Herald-Despatch, Decatur, Ill.

(J) Jett, E. G., Fredericksburg, Va.; Juire, C. E. Lynnville, Iowa.

(K) Kirkbride, M. Frank, Spring Lake Beach, N. J.; Keating, J. William, Ann Arbor, Mich.; Kirkley, C. A., Toledo, Ohio; Kales, J. D., Chicago, Ill.

(L) Leaning, J. K., Cooperstown, N. Y.; Longfellow, P. C., Cincinnati, Ohio; Loeb, H. W., St. Louis, Mo.

(M) Millard, P. H., St. Paul, Minn.; Montgomery, E. E., Philadelphia, Pa.; McDonald, Dr., Grafton, N. Dak.; Mellier Drug Co., St. Louis, Mo.

(N) North American Phonograph Co., Chicago, Ill.; Nelson, D. E., Chattanooga, Tenn.

(P) Parvin, Frank S., Philadelphia, Pa.; Pettyjohn, E. S., Alma, Mich.; Pratt, John W., Boston, Mass.; Post-Graduate Medical School, New York City; Parkinson, J. H., Sacramento, Cal.

(R) Ryan, L. R., Galesburg, Ill.

(S) Sauer, F. N., Sandiac, Wis.; Smith, Mrs. Mary, New York City; Schenck, W. L., New Castle, Col.; Smith, Chas. A., Darlington, Wis.; Senn, Emanuel J., Chicago, Ill.; Shepard, Chas. H., Brooklyn, N. Y.; Souchon, Ed., New Orleans, La.; Schulze-Berge & Koechl, New York City.

(T) Trowbridge, L. S., Detroit, Mich.; The Toledo Medical Compend, Toledo, Ohio; The Sanitarium, Battle Creek, Mich.

(W) Woodbury, Frank, Philadelphia, Pa.; Woodburn, F. C., Indianapolis, Ind.

### PAMPHLETS RECEIVED.

Bulletin Health Dept., Bureau Vital Statistics. Chicago.

Cholera. Its Prevention and Treatment. Typhoid Fever. Treatment. By Elmer Lee, A.M., M.D., Ph.D.

Zur Behandlung der Epilepsie. By Konrad Alt.

The New Orleans Sewerage System commenced with Inaugural Ceremonies. April 18, 1894.

Memoir of Alfred Ludlow Carroll, M.D.

The Therapeutic Uses of the Salts of Cesium and Rubidium. By T. W. Schaeffer, M.D.

Blennorrhea. By J. T. Jelks, M.D.

Etiology and Treatment of Pneumonia. By J. T. Jelks, M.D.

Some Effects of Blennorrhea in Women. By J. T. Jelks, M.D.

Address on Medical Education. By J. T. Jelks, M.D.

The Prevention of Venereal Diseases. By J. T. Jelks, M.D.

Report of a Case of Gunshot Wound of the Liver and Stomach. Laparotomy. Recovery. By J. T. Jelks, M.D.

Comparative Value of Mercury and the Iodids in Treatment of Syphilis. By J. T. Jelks, M.D.

Tumor of the Brain Simulating a Vascular Lesion. By J. T. Eskridge, M.D.